

DOCUMENT RESUME

ED 029 940

UD 008 774

By-Fleishman, Joel L.

Yale Summer High School: Report of the Director, 1965 Session.

Yale Univ., New Haven, Conn.

Pub Date 65

Note-151p.

EDRS Price MF-\$0.75 HC-\$7.65

Descriptors-\*College High School Cooperation, \*Compensatory Education, Course Content, Curriculum, \*High School Students, Males, \*Summer Schools, Tables (Data), Talent Development, Teachers, Tutoring, \*Underachievers

Identifiers-Yale University

Described here in extensive detail is the second year of a talent development summer high school at Yale University. A compensatory program was provided for 117 underachieving Negro and white boys, judged to have unrealized intellectual potential, who came from both urban and rural areas. The report discusses the students, teachers, tutors, and administrative staff. The curriculum and course content as well as other features of the program are presented. Appendixes offer additional relevant information. (NH)

ED029940

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE  
OFFICE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE  
PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS  
STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION  
POSITION OR POLICY.

YALE SUMMER HIGH SCHOOL

REPORT OF THE DIRECTOR

1965 SESSION

JOEL L. FLEISHMAN  
DIRECTOR

EQUAL EDUCATIONAL OPPORTUNITIES  
PROGRAM COLLECTION

UD 008 774



YALE SUMMER HIGH SCHOOL

REPORT OF THE DIRECTOR

1965 SESSION

TABLE OF CONTENTS

|                                                        |    |
|--------------------------------------------------------|----|
| Preface                                                | i  |
| Acknowledgments                                        | iv |
| I. Introduction                                        | 1  |
| II. Some Basic Guidelines                              | 5  |
| III. The Students                                      | 7  |
| IV. The Teachers                                       | 10 |
| V. The Tutors                                          | 13 |
| VI. The Administrative Staff                           | 17 |
| VII. The Yale Summer High School Community             | 19 |
| VIII. The Curriculum                                   | 20 |
| A. English Program                                     | 21 |
| B. Mathematics Program                                 | 27 |
| C. Time, Space, and Matter                             | 31 |
| D. Speech                                              | 31 |
| E. Study Skills                                        | 32 |
| F. The Tutors' Seminars                                | 35 |
| G. Symbolic Logic                                      | 39 |
| H. Directed Studies Seminar for the Returning Students | 43 |
| IX. Discipline                                         | 49 |
| X. The Schedule                                        | 50 |
| XI. Orientation                                        | 53 |
| XII. The Athletic Program                              | 55 |

|        |                                                  |    |
|--------|--------------------------------------------------|----|
| XIII.  | The Health Program                               | 57 |
| XIV.   | Activities                                       | 58 |
| XV.    | Facilities                                       | 62 |
| XVI.   | Research and Evaluation                          | 65 |
| XVII.  | The Program of Follow Up                         | 68 |
| XVIII. | Personal Impressions and Preliminary Conclusions | 72 |
| XIX.   | Conclusion                                       | 77 |
|        | Appendices                                       |    |

#### ADMINISTRATIVE BOARD OF THE YALE SUMMER HIGH SCHOOL

Richard B. Sewall, Professor of English and Master of Ezra Stiles College,  
Yale University, Chairman

\* Nelson H. Brooks, Associate Professor of French and Director of Summer  
Activities, Yale University

\* Claude E. Buxton, Professor and Chairman of the Department of Psychology,  
Yale University

Henry Chauncey, Jr., Special Assistant to the President, Yale University

R. Inslee Clark, Jr., Dean of Admissions and Student Appointments, Yale  
University

Edward J. Gordon, Associate Professor of English and Director of the Office  
of Teacher Training and Master of Arts in Teaching, Yale  
University

David B. H. Martin, Assistant to the Provost, Yale University

\*\*George P. Springer, Assistant Dean of the Graduate School and Director  
of Summer Activities, Yale University

#### ADVISORY COMMITTEE TO THE YALE SUMMER HIGH SCHOOL

Layman E. Allen, Associate Professor of Law, Yale University

Charles Brown, Superintendent of Schools, Newton, Massachusetts

Morris S. Davis, Director of the Computer Center, Yale University

Leonard W. Doob, Professor of Psychology, Director of the Division of  
Social Sciences, Yale University

Dr. John S. Hathaway, Director of the Department of University Health and  
Lecturer on Epidemiology and Public Health, Yale University

Arthur Howe, Jr., President of the American Field Service, New York City

William Kessen, Professor of Psychology, Yale University

Delaney Kiphuth, Director of Athletics, Yale University

Charles E. McCarthy, Jr., Director of the Cooperative Program for  
Educational Opportunity and Assistant Director  
of Admissions and Freshman Scholarships, Yale  
University

David R. Watkins, Reference Librarian and Research Associate, Sterling  
Memorial Library, Yale University

\* effective September 1, 1965

\*\* resigned September 1, 1965

## PREFACE

In response to the call in 1963 by President Kennedy for institutions of higher education to bring their resources to bear in the attempt of the nation to solve the complex of problems arising from racial discrimination in the United States, Yale University, with the assistance of the National Science Foundation, the Ford Foundation, and several other philanthropies, and in conjunction with Hampton Institute,<sup>1</sup> established in 1964 the Yale Summer High School. It was the intent of Yale and Hampton to provide to one hundred able boys, who were being held back by the interwoven burdens of cultural deprivation, educational disadvantage, and economic hardship, an intensive educational experience which might enable them to make real for themselves that condition of freedom which exists only in the full development of the capacities with which one is endowed at birth.

The Yale Summer High School students were to be boys<sup>2</sup> between the tenth and eleventh grades<sup>3</sup> who were capable of undertaking a college education of high quality but who thought themselves barred from such an opportunity by the economic circumstances into which they were born. Because it appears to them unattainable, such a goal often seems not worth the striving. As a result, such students have no compelling purpose

---

<sup>1</sup>Because of the geographical distance between Hampton, Virginia, and New Haven, and because of the need, arising out of the very late completion of the funding of the 1965 Yale Summer High School, to make many decisions quickly, it was decided in the spring of 1965 to suspend the joint administration of the Yale Summer High School.

<sup>2</sup>Many factors were weighed in reaching the decision to conduct an all male program. Perhaps decisive was the considered judgment that the social pressures arising out of coeducation might hinder rather than assist our attempt in a period as short as one summer to begin to solve the problems of underachieving students.

<sup>3</sup>This age level represents a conscious attempt to compromise between the need to make an educational intervention of this kind as early as possible and the anticipated reluctance of parents to allow young children to spend two months hundreds of miles from home. Inherent in the choice of the tenth grade level is a judgment that a university's intellectual resources can be utilized more effectively by students midpoint in their secondary education than by those at a younger age.



commensurate with their abilities, and therefore allow themselves, perhaps even encourage themselves, to lapse into the self-waste which is the inevitable reward of those who play the effortless game of "getting by".

Typically, the schools which these boys attend are unable to "turn them on". Overcrowded, understaffed, and poorly financed, not many of them focus enough skilled attention on each boy to help him free himself of the hindrances which his economic and cultural milieu have imposed upon him or which his fears have forged for him. Effectively ignored by those who might have been able to help him, the underachiever finds himself adrift in an environment from which no escape seems possible. Even if he were to glimpse other possibilities and dream of escape, the cumulative years of inadequate training in basic skills encumber him. Lacking both ends and means, these boys are caught in a vicious circle: their lack of purpose vitiates the potential of the education that is available to them; their inadequate training makes any goal they might envision unrealizable. We believed that what was needed for such boys was a program which would attack both means and ends simultaneously, and with enough intensity to crack the vicious circle of low expectations and low achievement which, unbroken, threatened to make of them life-long underachievers.

Yale decided to bring such boys to its campus and to introduce to them all the resources of a good university -- a great library, a variety of laboratories where science and technology are aiming always toward discovery, renowned undergraduate, graduate and professional schools--all peopled by men and women who have chosen for themselves lives of intellectual challenge and humane learning. By enabling these boys to come to its campus and to acquire an acquaintance with a university, Yale hoped to generate in each of them a desire for a college education as an immediate, vividly-perceived goal -- a commitment which would have been impossible for them to make so long as the college campus remained remote and unfamiliar.

Once that desire took hold, its magnetism might enable a summer high school conducted in such a setting to begin to dispel the apathy and even antipathy to learning induced by a dozen years of lessening hope. On campus the boys would associate with lively scholars of great repute and with college students carefully chosen for intellectual and personal qualities which made them idealizable models. In their studies, they would be guided by gifted, dynamic high school teachers from all over the United States, teachers intent on making the process of learning itself vivid, exciting, and personally challenging. Each teacher would strive to stir an appetite for knowledge, for participation in the life of the mind, and to make learning not "fun" but irresistibly attractive -- an activity in



which students would choose to immerse themselves.

The teaching, if it were to succeed, had to be sufficiently imaginative and flexible to search out within each boy some nub of interest, however slight or obscure, which could serve as a base on which to pyramid his intellectual achievement. Once this point of engagement had been found and the process of building had commenced, the student would experience for himself the excitement of an active commitment to the cultivation of his mind and would be more eager to exact of himself the time, effort and energy required to polish his talents to their highest lustre.

## ACKNOWLEDGMENTS

Yale University is immensely grateful to the National Science Foundation, the Cummins Engine Foundation, the Compton Trust, the Reynolds Bagley Verney Foundation, and the New Haven Foundation for their substantial contributions in support of the 1965 session of the Yale Summer High School. The generous and enthusiastic backing of the officers of these foundations opened to each of 117 bright young men an opportunity to transmute potential into accomplishment -- an opportunity which, but for their generosity, might never have been more than a wish.

The faculty, staff, and students of the Yale Summer High School are indebted to many other benefactors whose support, though not financial, was nonetheless instrumental in creating and sustaining the Yale Summer High School during 1965. President Kingman Brewster's vigorous commitment to the School, which had made possible its establishment in 1964, continued to be the most vital force in solving the many problems which attend the planning and implementation of such a program. It was his initiative which secured the necessary funds, his unwavering support of the staff which made easy the resolution of hard decisions, and his willingness to give freely of his own time which ensured the complete cooperation of the University community.

Mr. Richard B. Sewall was much more to the School than Chairman of the Administrative Board and supervisor of the English curriculum. His humane wisdom and grace were in many ways the guiding spirit of the Yale Summer High School. His time and help were regularly sought and always obtained. His influence pervaded all facets of the program -- the selection of faculty and the shaping of curriculum, participation in classes and assemblies, presiding at ceremonies and official functions, and counseling individual students with respect to their problems, hopes and ambitions.<sup>4</sup>

It was because of the devotion and attentiveness of David B. H. Martin to the Yale Summer High School that the new director was able to move into his position unhampered by accumulated duties which would otherwise have normally attended so late a transfer of responsibility. His insight, imagination, and precision in attacking the many problems which confronted the School, and his enlightened and unstinting counsel in solving them, were indispensable to the success of the program.

John S. Ellsworth, Jr., whose skillfulness and resourcefulness made the 1964 session so successful, willingly and generously shared his rich experience with the staff of the 1965 session. Though not directly involved

---

<sup>4</sup> See appendix for his remarks at the Commencement Exercises.

in the 1965 session, he contributed immeasurably to it. He was always available to assist, and his devotion to the Yale Summer High School was coupled with a keen sensitivity to the problems of transition of responsibility.

No problem was too large for the competence of Henry Chauncey, Jr., and no detail was so minute that it failed to elicit his careful attention. His skill and advice were of incalculable value to the program.

Mr. A. Tappan Wilder, who had been the Associate Director of the 1964 session of the Yale Summer High School, consented to serve in that capacity again in 1965. His responsibility extended to every aspect of the Yale Summer High School program. No listing of his contributions could be exhaustive, and no description of the imagination, effort, energy, and devotion which he put into the program could possibly do justice to him.

Finally Mr. William Torbert, who was chosen to be a tutor in the 1965 session of the Yale Summer High School and who became Associate Director even before he had assumed his tutorial responsibilities, provided throughout the entire year both imaginative leadership and attentive administrative care. He established the system of follow up and gave to it unreservedly of his time, energy, and emotions. The Director is in his special debt for many insights and ideas, and for the generosity of spirit which characterized his daily commitment.

To all these, and to many more, the students, faculty, and Director of the Yale Summer High School recognize their debt with deep appreciation.





## I. INTRODUCTION

If one of the many questions puzzling education in the United States at this time can be isolated as having greater importance and being more difficult of solution than any of the others, it is the paradox implicit in our attempt to educate individual human beings by means of mass methods.

Because of the pressure of numbers and the parsimony of its financing, the American educational system is increasingly forced to fit the student to the school, rather than the school to the student. All too often the needs of students at a given age and grade level are generalized, and the resulting curriculum is prescribed for all students at that age or grade level. If some students fail to learn, they are blamed on the theory that they ought to have the needs which are being met through a curriculum designed for a stereotype -- prescriptions untempered by individual needs. This process involves a not very subtle shift of culpability for the failure of an individual to learn. If a student does not respond to the offerings of a school, it is he who is faulty and not the school system. Yet America is pledged to the education of all her children, and each unmoved youngster represents a default on that promise.

Each year pours into all grade levels of the American educational enterprise increasing numbers of students, thereby compounding the problems which remain unsolved from preceding years. Resources have not risen fast enough to enable the schools to grapple successfully with the problems posed by numbers alone, much less to develop the means whereby instruction may be individualized to any meaningful degree.

Blame cannot justly be heaped upon the school system. Teachers and administrators have done only what they have been forced to do by the public's unwillingness to provide the wherewithal to support custom-tailored education. In fact, teachers and administrators are wearing themselves down every day of the week in trying, by working with individual students as best they can, to compensate for the inappropriateness of the mass curriculum to the specific needs of individuals who are outside its sway.

If there is to be genuine education of individuals, it can be accomplished only through growth in individuals. A generalized mass curriculum will not only fail to educate those students who have advanced beyond or lagged behind it, but it will also fail to develop to the maximum



each of the individuals who falls within its scope. Differences among individuals with respect to intelligence, talent, tastes, ambitions, interests, and cultural experience are all so wide and form such curious and wonderfully diverse concatenations in human beings that no generalized curriculum can begin to tap and develop the strengths and talents of an individual student.

This is not to say that the education of all the nation's children is an impossible feat. Our error is in trying to achieve this goal with only one-half of a plan. We are employing a generalized curriculum, which is no more than a good foundation, but we are not tempering or adjusting it to individuals by providing them with sufficient personal attention to compensate for the inapplicability of the general curriculum to the individual needs.

Because of this lack of attention to individual interests and needs, much of the intellectual and artistic wealth of the nation is at present being left unmined. As each person's genetic inheritance is different from that of every other person, so his interests and capacities, as well as the combination in which they occur, differ. If the individual is to be developed to the full, his own particular interests and abilities must be capitalized at each point in his education in order to draw him to ever higher stages of intellectual and social development. Every student needs a sound foundation, but if he gets no more than that, his achievement will be mediocre in comparison with what he might have accomplished within a system of education which is mindful of the individual. The kinds and mixture of materials and techniques utilized in each person's education must of necessity be different for each individual if the full intellectual, artistic, and social development of that person is to be attained.

Small classes, in and of themselves, do not guarantee individual intellectual growth. What is crucial is the opportunity afforded to the teacher in a small class to discover the interests and capacities of the individuals within the class and to design for each of them a program which will carry him to the next stage of development.

What plagues the nation's schools at large devastates the schools whose students come from backgrounds of economic disadvantage. Because these schools are even more than all others characterized by overcrowding and understaffing, by outmoded and inefficient facilities, and by outdated equipment and curricular materials, their teachers have even less opportunity to provide the individualized attention which is more desperately needed here than elsewhere.

Because they can see nowhere around them models of high intellectual attainment similar enough to them in economic and social backgrounds to be realistically subject to identification and emulation, there is considerably less incentive to work hard.

Because of the overcrowding and understaffing of their schools, their teachers and counselors, who are therefore overworked, find it increasingly difficult to discover and build upon their students' interests in a manner that will prime them to begin running on their own steam.

The central problem of compensatory education is one of changing motivation, of convincing a young person that he is better than he thinks he is, that he can make much more of himself than he thinks he can, and than he thinks others think he can. In other words, somehow the student's concept of himself has to be changed. But that is not all. If the changing of motivation is the main goal, the strategy must first of all be to find within the student a spark of interest, however small, in some area worthy of cultivation and, secondly, to provide the skills in reading, writing, and oral communication necessary to build upon this interest. By drawing on the student's own strength, it is possible to activate his own initiative. In effecting this change in motivation, one of the most valuable levers to be utilized is the raising of the student's aspirations. This, when coupled with the discovery and development of an internal interest, will dispose the student to engage himself willingly in the hard tasks of mastering the skills necessary to achieve his new goals.

We must not underestimate the difficulty of undoing in a short period of time the results of an accumulation of years of depressed intellectual endeavor. With each passing month, the lack of motivation tends to reinforce itself ever more strongly, and the extent to which knowledge and skills have been lost makes it cumulatively difficult to catch up.

Nevertheless, there is growing evidence that short-term, compensatory educational interventions, properly designed and implemented, can be effective both in lifting personal aspirations to realistic levels, and, to a lesser degree, in correcting the educational deficiencies which have accrued over time. Our knowledge of the effects of compensatory education is still too limited to be able to say with certainty how much of the deficiency in skills and achievement can be remedied over the space of several weeks in the course of a summer. It will almost certainly take several years.

However lengthy the required period, however, the key is in having a teaching staff which is composed of enough sufficiently sensitive, empathetic, and intelligent men and women to come to know each of the students as an individual; to become familiar with that combination of inherited intelligence, talent, acquired traits, interests, and experiences undergone which defines him; to discover the key to unlocking his particular ambitions and the energy to fuel them.

The overcrowded public schools, as presently structured, cannot do this, despite the dedication of imaginative, resourceful, and over-worked teachers. There are simply too many students deserving of attention to permit teachers to focus enough time and effort upon those who need it.

Thus, compensatory education brings the students out of their environment for a summer -- away from the daily reminders and reinforcements of their failure to achieve. It tries to unlock the students with a key it discovers within the students themselves and presents them with it, in the hope that they will continue to use it profitably.



## II. SOME BASIC GUIDELINES

Having decided to establish a summer high school, Yale began to tackle the structural and conceptual questions which would define the kind of institution it was to be.

The Yale Summer High School rests on the assumption that there are many young people whose social and intellectual achievement is markedly below that level at which their talents, with the proper incentive and stimulation, would enable them to perform. It may therefore be said that, in these students, there exists a gap between potential and achievement. It was Yale's hope that its summer high school could be the instrument by means of which a desire to explore might be reawakened in these youngsters and through which they might be provided the intellectual skills and cultural experience necessary to translate this desire into effective and purposeful achievement.

To accomplish such a purpose, the widest possible diversity within the student body, with respect to intellectual ability, race, and geographical background, is a sine qua non. In the first place, the potential-achievement gaps among the students should vary both as to width and as to their respective locations on the intellectual spectrum.

Of equal importance to diversity of intellectual level is diversity of geographic background. Yale believed that it would be much easier to effect changes in the attitudes and motivation of the individual student if the character of the disadvantaged circumstance from which he came differed from the background of other students who were in the same program with him. If, for example, all of the students come from urban slums -- an environment which tends to breed both cynicism and suspicion with respect to any kind of proffered assistance, especially that designed to raise aspirations and improve motivations -- the negative attitude of each boy would tend to be reinforced by the negative attitudes of all the others. By incorporating into the program underachievers from rural backgrounds -- students whose attitudes tend to be more optimistic and who usually welcome opportunity, assistance and support -- the cynicism and suspicion of the urban students would be diluted and compromised. By studying with and coming to know students from many other parts of the country, all of whom suffer to some degree from the potential-achievement gap, each student would come to think of his handicap as a function more of his own will than of the particular circumstances in which he lives.

The same observation may be made about diversity as to race. A program which consists entirely of Negro students suffers under both the psychological disadvantage of implying by its very existence that the Negro



peculiarly needs assistance, and also the learning disadvantage inherent in a homogeneous cultural environment. Inclusion in the program of under-achieving white students enables the Negro students to recognize that persons who are not held back by the multiplicity of discriminations flowing from racial prejudice nonetheless suffer from motivational and attitudinal handicaps. White students, on the other hand, would benefit from intellectual companionship and competition with the Negro students. And, in addition to having their social attitudes influenced positively, they would come away from a summer at the Yale Summer High School with their cultural experience significantly enriched by their association with the Negro students. The inclusion in the program of students from several ethnic subcultures would have essentially the same effects.

On the basis of our experience of two years in working with under-achieving students, we are convinced that the greater the program's diversity in all respects the easier it is to convince each student that his underachievement is not the inevitable and inexorable result of the peculiar circumstances of his disadvantage but, instead, a widespread and very superable phenomenon.

### III. THE STUDENTS

The students in the 1965 session came from 34 states.<sup>5</sup> Nearly 65% of them were from urban areas and 35% from rural areas -- roughly the national urban-rural population ratio. Virtually half of the students were from the North and half from the South. Approximately half of the students were Negro, and half were white. In addition, there were American Indians in the program as well as a variety of ethnic representation among the white students, such as Puerto Rican, Mexican-American, Polish-American, and Italian-American.

While the mean I.Q. score for the 1965 student body was 121, individual scores ranged from below 100 to above 150. In each of the students, however, there was a significant, measurable potential-achievement gap.

To qualify for consideration, an applicant for the 1965 session was required to be between the tenth and eleventh grades, to show indications of unrealized intellectual promise, to manifest qualities of personal leadership, to evidence the ability to benefit from the rigorous and broad program of study, and to be unable, because of limited economic resources, to undertake such a program at his own expense.

The process of selecting students for the 1965 session was governed by the geographic, racial,<sup>6</sup> and ethnic patterns which we sought to achieve within the student body.

---

<sup>5</sup>The enrollment by states was as follows: Alabama - 9; Arizona - 3; Arkansas - 4; Connecticut - 6; District of Columbia - 3; Delaware - 2; Florida - 1; Georgia - 4; Illinois - 3; Indiana - 2; Iowa - 1; Kansas - 1; Kentucky - 1; Louisiana - 2; Maine - 2; Maryland - 2; Michigan - 1; Mississippi - 4; Missouri - 7; North Carolina - 3; North Dakota - 3; New Hampshire - 3; New Jersey - 5; New York - 13; Ohio - 7; Oklahoma - 1; Pennsylvania - 4; South Carolina - 5; South Dakota - 2; Tennessee - 2; Texas - 1; Virginia - 6; Vermont - 2; West Virginia - 1.

<sup>6</sup> The recruitment of students and the consideration of their relative qualifications were under the direction of Mr. Charles McCarthy, Director of the Cooperative Program for Educational Opportunity. (This program is conducted by the eight Ivy Group colleges, the Seven College Conference for Women, and the College Admission Center of Evanston, Illinois. Its purpose is to find students of the same type as those sought by the Yale Summer High School, but who are in their last year of high school, and to assist them in finding places in and financial support for college.) Mr. McCarthy served as Chairman of the Yale Summer High School Committee on Admissions, which was composed of the following persons: Mr. William A. Banner, Visiting Professor of Philosophy, Yale University; Mr. Richard A. Goldsby, Visiting Lecturer in Biology, Yale University; Mrs. Evelyn B. Rizzolo, Assistant to the Director, Cooperative Program for Educational Opportunity; and Mr. John A. Wilkinson, Assistant Dean of Yale College.

The Committee of Admissions, drawing on the experience of its members and of the Yale Office of Undergraduate Admissions, carefully chose in different parts of the country schools which seemed likely to yield collectively a student body of the specific configuration we desired. The Committee made a tentative allocation of spaces among the schools, and invited the principals and guidance counselors to nominate two or more students for each vacancy which had been provisionally assigned to the school. In addition, the Committee solicited nominations from the United Scholarship Fund for Indian Students, the Educational Counseling Service of the Board of National Missions of the United Presbyterian Church, and several other organizations of which each has as its chief function the discovery and development of talent among the disadvantaged. Each nominator was urged to exercise great care in ensuring that the qualities of each nominee matched the criteria for selection.

In addition to those schools and organizations from which the Committee solicited applications, many persons wrote the Yale Summer High School to seek admission for specific individuals, and many schools, which though not informed of the program had heard about it, also sought to recommend students for admission. Students so nominated were evaluated by the Committee, according to the criteria of selection, but the decision on each applicant was affected by the extent to which it would compromise the racial, ethnic, and geographical ratios for which we were striving.

In addition to forwarding their nominations to the Yale Summer High School, the nominators were asked to return to us application forms completed and signed by the students themselves. The nominators were also requested to give to one or more teachers of the recommended students evaluation forms to be completed by the teachers and returned along with all other forms. Nominators submitted records of the results which the students had obtained on various intelligence, achievement and personality tests, along with transcripts of the students' academic records. Where possible, each nominee was interviewed by a recent Yale alumnus, who provided the Committee with an account of his interview impressions.

The Committee on Admissions then reviewed what it knew about each student, and sought to determine, by sifting all of the information at its disposal, whether there was, in the background of the applicant, some evidence of unrealized promise, some indication that the applicant possessed abilities which he had not yet begun to develop significantly.

The Committee then attempted to screen out the students who seemed likely to succeed without having the benefit of a program like the Yale Summer High School. Approximately ten of them, however, were admitted to serve as pacesetters for the other students, but even these pacesetters had clearly



been underachieving. The highest priority for admission was given to those applicants who probably would not develop their potential without a compensatory program, but who seemed to the Committee likely to profit from the course of study at the Yale Summer High School. The Committee was instructed to take risks -- to give students the benefit of the doubt in its evaluations.<sup>7</sup>

The students were organized into groups of ten -- called decades -- which were as nearly as possible balanced racially, ethnically, geographically, and intellectually. Each decade was in the charge of a resident tutor and formed a unit for housing purposes and athletic competition.

The decades made possible efficient, but informal, communication among students and staff, but, more important, each of them provided a setting in which a specially chosen individual, the tutor, could work closely with individual boys, and could come to know and understand their individual needs. Living with the boys, helping them with their studies, and counselling them on countless subjects, the tutor played a unique role in discovering the "key" to each of his students. Each decade developed that spirit of a "community within a community" which was extremely important in achieving the goals of the program.

---

<sup>7</sup> The members of the Committee on Admissions gave, without compensation, many hours of their time, and the results of their deliberations manifested insight and sensitivity. The faculty and staff of the Yale Summer High School were greatly pleased with the wide range of challenges presented during the summer and by the rich diversity of the student body. Mr. McCarthy's contribution of time, energy, and expertise was especially large and invaluable. The Yale Summer High School is particularly indebted to Mr. Fred Williams, Director of the Human Relations Unit of the New York City Board of Education, Mr. Irving Widaen, Coordinator of Pupil Programs for the Human Relations Unit, Miss Tilly Walker, of the United Scholarship Fund for Indian Students, Mr. Samuel Johnson, of the Educational Counseling Service of the Board of National Missions of the United Presbyterian Church, for their unfailing assistance in selecting and nominating students for consideration by the Committee on Admissions.



#### IV. THE TEACHERS

In appointing teachers to the faculty of the Yale Summer High School, we sought to find persons either presently teaching in or with extensive past experience in public school systems. For the directed studies program, the advanced level seminar for students attending the Yale Summer High School for the second summer, we sought to obtain a college faculty member.

We were looking for dynamic teachers who were capable of exciting the students and inspiring them to participate enthusiastically in class discussion, who had an interest in developing and evaluating new curricular materials and teaching techniques appropriate to the needs of underachieving students, and who were prepared to devote some of their time during the subsequent school year to keeping in touch with their Yale Summer High School students. We looked for teachers who were stimulating, empathetic, articulate, and rigorous in their approach, thoroughly grounded in their subject matter, skilled in conveying enthusiasm for learning, and not fearful of demanding the utmost of their students.

We expected each member of the faculty to give full-time attention to the Yale Summer High School students, to be around the school until at least three o'clock in the afternoon, and, if possible, to have students over to his apartment in the evenings for supplementary assistance and informal conversation. The faculty members sought out students for individual conferences and for extra work on special problems. By their willingness to devote their time and energy to the Yale Summer High School all members of the faculty demonstrated a genuine commitment to the goals we sought to achieve.<sup>8</sup>

The faculty members in the 1965 session were as follows:

English -- Dante Peter Ciochetto, Chairman, B.S. with honors, 1936, Hibbing (Minnesota) State College; M.A. in English, 1953, University of Minnesota; English, History, and Speech teacher at Sauk Rapids (Minnesota) High School, 1946-1952; Instructor in English, College of Engineering of the University of Minnesota, 1953-1954; teacher of English at Tucson High School, 1954-1955; teacher of English, Pueblo

---

<sup>8</sup>We recruited the teachers for the Yale Summer High School by making informal inquiries among a number of organizations and individuals who were in a position to know some of the best teachers throughout the country. The Yale Summer High School wishes particularly to express its appreciation to Dr. Charles Keller, Director of the John Hay Fellows Program, to Mr. Charles Brown, Superintendent of Schools in Newton, Massachusetts, to Mr. Ralph McAlister, of the Learning Institute of North Carolina, and to Dr. Gordon McAndrew, Director of the North Carolina Advancement School.

High School, Tucson, Arizona, 1955-1965; Chairman of the English Department at Coleytown Junior High School, Westport, Connecticut, 1965-present. Mr. Ciochetto was a John Hay Fellow at Harvard University, 1959-1960, and a John Hay Summer Fellow at the University of Oregon, 1964. He has been a reader of the Advanced Placement Examination in English since 1960, and of the College Board Examination in English since 1961.

Charles B. Church, B.A., Wesleyan, 1956; M. A., University of Chicago, 1958; M.A.T., Wesleyan, 1959; English teacher at Watching Hills Regional High School, Plainfield, New Jersey, and North Haven (Connecticut) Senior High School.

Miss Carroll Dawes, B.A., University College of the West Indies, 1955; Rose Bufford Training College of Speech and Drama, 1963-1964; Senior English Mistress, Merl Grove High School, Kingston, Jamaica, 1957-1963; Fulbright Scholar, 1960-1961; Acting Principal, Merl Grove High School, 1962-1963; currently a candidate for the Doctorate in Fine Arts, Yale School of Drama.

Arthur L. France, A.B., Northwestern University, 1956; M.A., New York University 1958; English teacher at Pascack and Pascack Hills High Schools until 1965; teacher of English, Scarsdale High School, 1965-present.

Bruce L. MacDonald, B.A., Alfred University, 1953; M.A., Alfred University, 1955; Instructor at Alfred University, 1955-1959; taught in high schools in the state of New York, and at Rincon High School in Tucson, Arizona; member of the College Entrance Examination Board Committee on Composition.

Thomas A. Wilson, B.A., Earlham College, Richmond, Indiana, 1961; M.A.T., Howard University, 1965; Peace Corps educational aide in the Phillipines, 1961-1963; intern teacher at Cardozo Pilot Project in Urban Education, 1963-1964; teacher of English at Cardozo High School, Washington, D.C., 1964-1965; currently a doctoral candidate at the Harvard Graduate School of Education.

Mathematics -- George M. Cohan, Chairman, A.B., Dartmouth, 1956; M.A.T., Wesleyan, 1959; presently a candidate for the Doctorate of Education, Harvard University; taught mathematics and history at Staples High School in Westport, Connecticut; presently Lecturer in Education, Wesleyan University M.A.T. program; Instructor in Mathematics, Yale Summer High School, 1964.

Charles F. Linn, A.B., Colgate, 1952; M.A.T., Wesleyan, 1957; taught at junior and senior high schools in Middletown, Glastonbury, and Westbrook, Connecticut; mathematics editor for Science and Math Weekly; currently teaching at the State University of New York, Oswego, New York.

Mrs. Robert Hayden, B.A., Boston University, 1960; special teacher of mathematics in the education program, Newton, Massachusetts, 1963-present.

Robert F. Rosin, B.S., Massachusetts Institute of Technology, 1957; M.S., 1960 and Ph.D., 1964, University of Michigan; Assistant Professor of Engineering and Applied Physics, Yale University.

Directed Studies -- Morris Kaplan, B.A., Williams College, 1963, magna cum laude graduate in Philosophy; Ph.D. candidate in Philosophy, Yale University; Yale Law School, 1968; Instructor in English Remedial Enrichment Program, Bishop College, 1964; Freshman Counselor, Yale University, 1964; Assistant in Instruction, Department of Philosophy, Yale University, 1965.

Time, Space and Matter -- Robert Hayden, B.A., Boston University, 1959; Ed. M., Boston University, 1961; teacher in the Newton, Massachusetts public school system, 1961-1965; currently doing post-graduate work at Harvard University.

WFF'N Proof -- Roderick A. Magoon, B.S., Indiana University; candidate for M.S. at the University of Michigan; Chairman of the Science Department and teacher of English and Logic at Besser Junior High School, Alpena, Michigan.

Thomas R. Holahan, B.A., Yale University, 1963, magna cum laude graduate in English; D.A.A.D. scholarship to study philosophy and literature at the University of Freiburg (Germany), 1963-1964; currently a Ph.D. candidate in philosophy at Yale University.

Study Skills -- Richard Milsten, B.A., Yale University, 1962; Instructor, Yale Study Skills Office, 1962-1965; Instructor, Yale Summer High School, 1964; currently in Columbia University, College of Physician and Surgeons, 1968.

Speech -- Mrs. Joyce Hirschhorn, A.B., University of Michigan, 1946; M.A., Teacher College, Columbia University, 1947; speech teacher, St. Gabriel's High School, New Rochelle, New York, 1950; Director of Dramatics and Public Speaking in the Adult Education Program, Jewish Center, Portchester, New York, 1951-1952; Instructor in the Yale Summer High School, 1964.



## V. THE TUTORS

The contribution of college undergraduates was crucial to the success of the program. Because they are close in age to the students, because they exemplify the enthusiasm and competence in intellectual pursuits which we hoped to instill in our students, and because of the excellent personal examples which they set, the tutors played a unique and in fact indispensable role in the program.

Each tutor was assigned a group of ten boys, with whom he lived in one section of the Yale Divinity School residence halls. The tutors supervised dormitory life, conducted study sessions, organized cultural, athletic and extra-curricular activities, and generally assisted their students in every conceivable way. From one o'clock in the afternoon until the last student light went out often well after midnight, they were with their own students or involved in general activities in which all students were engaged. Mornings found the tutors visiting classes, showing off the program to guests, driving sprained-ankled and sore-throated students to the Department of University Health, and preparing for their own seminars, mentioned below. An occasional tutor was seen on the tennis courts.

The demands on the tutors were especially great on weekends when they supervised social activities, led field trips, and were generally available for tackling any emergency, imagined or real. For the 1965 session the tutors rendered the kind of sustained, devoted, intelligent service which seemed impossible in prospect and now seems incredible in retrospect.

The 1964 program had utilized its staff of undergraduates chiefly as counselors, as supervisors, and as athletic coaches. It occurred to us that it would be especially helpful in instilling in the students an enthusiasm for learning if the college undergraduates, included in the program structure in the first instance because of their capacity to serve as personal models, could assume a major, independent, educational role within the program. After all, our goal was not only, or even mainly, to make our students into upstanding young men, but rather to fire them up with a zeal for discovery. Furthermore, highly motivated, intelligent young men whom we wished very much to have on our staff as tutors would not have been interested in a position of which the chief responsibilities were custodial and supervisory. On the contrary, they would be willing to undertake these demanding burdens as a part of the duties which they had to perform only if these responsibilities were coupled with the opportunity to teach as well.

To symbolize the change, they were called "tutors" rather than "counselors", and each one planned and taught a seminar which generally met twice a week in the early afternoon. They assigned reading and written



homework, and many organized field trips related to the subject matter of the seminars. As an educational device, the tutors' seminars were immensely useful in exciting in the students an appreciation of the importance of learning. If someone only three or four years older than themselves -- someone whom they admired -- could be infected with such enthusiasm for intellectual matters, and could teach so well, the students were forced to reconsider their own attitudes toward learning. Thus the tutors were cast in a role from which their influence on the boys could derive at least as much from their demonstrated educational competence as from their administrative authority in the residence halls.

In recruiting students for positions as tutors, we were trying to find young men of superior intellectual ability, breadth of personal interests and personal integrity, with demonstrated capacity for the discipline required for meaningful intellectual achievement; and generous with their time to the point of self-sacrifice. The nature of their duties also required that they be extraordinarily sensitive to the needs of boys three or four years their junior and capable of inspiring in them the desire to emulate their own achievements, values, and qualities.

We knew that it would not be easy to find college students who measured up to these qualifications, but we believe that we succeeded in gathering together a group of such men. Because it was clear that any proper evaluation of the capacity of the applicants to fill these positions would require an interview, we decided to limit our search to one school in addition to Yale. We could reasonably expect to attract a goodly number of highly qualified applicants and yet manage to interview all the candidates.

We chose Harvard because, like Yale, its student body, comprising men from all over the country and from all economic and social levels, seemed an especially likely place to find the intellectual and personal models of the excellence we were seeking, with the same diversity of race and region for which we were striving in our student body. We got an unexpected dividend in that the traditional rivalry between the two institutions contributed positively to the dynamics of the Yale Summer High School.<sup>9</sup>

---

<sup>9</sup>The Yale Summer High School is particularly indebted to Mrs. Mary Morrell, Director of the Summer Opportunities Office at Yale, to the deans of the colleges at Yale, to Mr. Thomas Pettigrew, Associated Professor of Social Relations at Harvard, Mr. Barney Frank, Assistant Senior Tutor of Winthrop House at Harvard, and Mr. Greg Craig, of Leverett House at Harvard for their zeal and interest in encouraging highly qualified applicants to compete for positions as tutors. We are also indebted to the staff of Dunster House, particularly Carey McIntosh, Alston Burr Senior Tutor, and Mrs. Donald Akenson, his secretary, for their generous assistance in arranging the interviews of the Harvard applicants.

Following are brief sketches of the 1965 session tutors:

Allard A. Allston -- Yale 1967; Darlington, South Carolina; a history major; a tutor in the 1964 Mississippi Project; touch football coach; seminar - "Ideas and Wisdom of Plato"; plans a career in business.

Dane Archer -- Yale 1968; Pine Plains, New York; an English major; a Yale National-AFS Scholar; seminar - "Contemporary Life as Seen Through the Arts"; basketball coach; plans a career as a writer.

Ernest B. Attah -- Harvard 1966; Uyo, Nigeria; a statistics major; seminar - "The Emerging Nations"; WFF'N Proof instructor; soccer instructor; plans a career teaching mathematics and statistics in Nigeria.

Jonathan D. Culler -- Harvard 1966; New Haven, Connecticut; a "History and Literature" major; seminar - "Modern Poetry"; volleyball coach; plans a career in college teaching.

Trevor A. Cushman III -- Yale 1964; Alexandria, Virginia; high honors graduate in "History, the Arts, and Letters"; taught English at the Robert Louis Stevenson School, Pebble Beach, California; tennis instructor; seminar - "Introduction to Classical Music"; plans a career in teaching.

Richard A. Gerard -- Yale 1966; New York City; an English Major; volleyball and swimming coach; seminar - "Art Appreciation"; plans a career in medicine or public administration.

Eugene Perry Link -- Harvard 1966; Plattsburgh, New York; a Philosophy major; WFF'N Proof instructor; tennis instructor; seminar - "Moral Philosophy"; plans a career in teaching.

Merle S. McClung -- Harvard 1965; Montevideo, Minnesota; magna cum laude graduate in English; Rhodes Scholar; captain, Harvard basketball team; basketball coach; seminar - "Shakespeare"; plans a career in law.

Donald H. Ogilvie -- Yale 1968; East Elmhurst, New York; Political Science major; basketball and touch football coach; seminar - "Race and Revolution"; plans a career in law.

William R. Torbert -- Yale 1965; Washington, D.C.; high honors graduate in "Political Science and Economics"; WFF'N Proof instructor; drama society; soccer instructor; seminar - "Personal Values"; plans a career in teaching; at present serving as Associate Director of the Yale Summer High School.

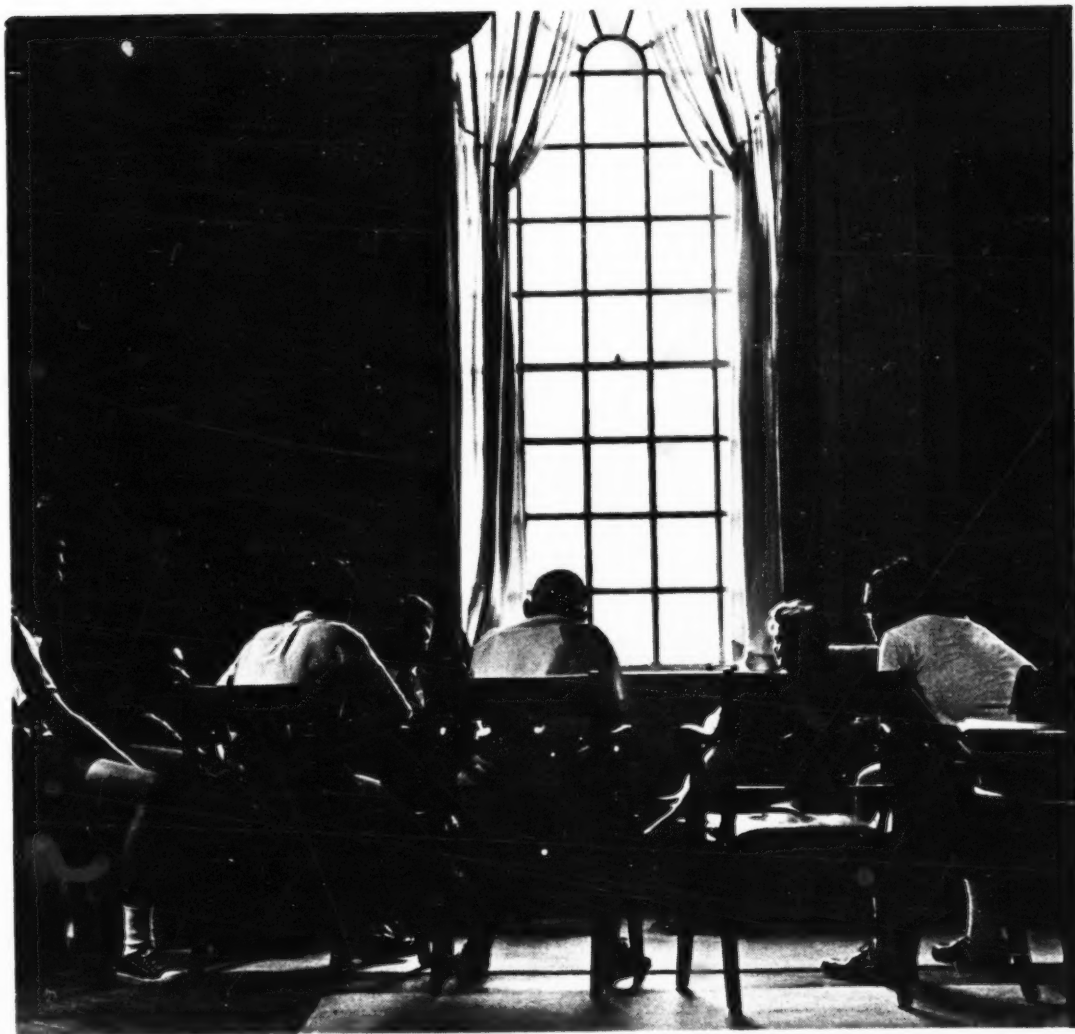
W. Frank White -- Harvard 1966; Canton, Mississippi; Harvard National Scholar; "Social Studies" major; debate society; softball coach; seminars - "Race and Revolution" and "American Foreign Policy"; plans a career in law and politics.

Bunli Yang -- Harvard 1965; Levittown, Pennsylvania; cum laude graduate in Physics; Knox Fellow; swimming instructor; seminar - "Modern Science and Society"; plans a career in teaching.<sup>10</sup>

---

<sup>10</sup>The Yale Summer High School is especially pleased to note the honors which have come to its tutors since the 1965 session. Jonathan Culler and Frank White have been selected as Rhodes Scholars; Perry Link has won a Rockefeller Traveling Fellowship and William R. Torbert has been awarded a Danforth Fellowship.





## VI. THE ADMINISTRATIVE STAFF

The administrative structure of the summer high school was deliberately kept simple in the hope of avoiding unnecessary rigidity.

Serving as Associate Director with general responsibility for the entire program was Mr. A. Tappan Wilder who had served in that capacity in the 1964 session. Mr. Wilder was a 1962 Yale graduate; a Rockefeller Scholar at Union Theological Seminary, 1962-1963; Assistant to the Director of Admissions, Yale College, 1963-1965. His contribution was central to every aspect of the program from decisions on large policy questions to supervision of the smallest detail in the day-to-day activities of the summer. He held full authority to act in the name of the Director.

Mr. Arthur L. France, also an English teacher, served as Associate Director and as Chairman of the Discipline Committee. His biographical sketch can be found in the faculty section.

Mr. Erik C. Esselstyn served as Assistant Director, with central responsibility for the scheduling of all activities and classes at the school, and as coordinator of the athletic program. Mr. Esselstyn discharged his responsibilities with great sensitivity and competence. He is a 1959 Yale graduate, and received the Master of Arts in Teaching degree from Yale in 1965. Mr. Esselstyn taught English at the Dartmouth ABC program in 1964, and is currently a member of a consulting firm in Boston.

Miss Anne E. Queen served as an Assistant Director with central responsibility for organizing the visiting speaker program, scheduling and receiving the school's guests, and coordinating religious services and activities. The superb way in which she discharged her responsibilities is manifest in the schedule of speakers and visitors which appears elsewhere in this report. Miss Queen serves as Director of the YM-YWCA at the University of North Carolina at Chapel Hill.<sup>11</sup>

Mr. Clark Brown, Jr., served as Assistant Director for administration and was in charge of procuring supplies for the summer high school, arranging transportation for individuals and groups, planning special activities, and generally looking to the many problems of logistics which inevitably arise in a day-to-day program. He did an extraordinary job. Mr. Brown will graduate in June, 1966, from Stanford University, where he is Vice-President of the

---

<sup>11</sup> Miss Queen was instrumental in the establishment of an Upward Bound Program to take place in the summer of 1966 at the University of North Carolina at Chapel Hill.

Student Body and will spend the next two years as an International Volunteer Services volunteer in Viet Nam.

Also participating in the Yale Summer High School were several students who agreed to help organize activities and perform other duties in return for room and board during the summer. Mr. Walter Wagoner, Jr., Yale 1965, and presently Admissions Officer in Yale College, planned all social activities for the students and was in charge of arranging the visits of the students with New Haven families on Sundays. Mr. James R. Adams, Yale 1965, and Managing Editor of the Yale Daily News, 1965-1966, helped with the Yale Summer High School News. Mr. Leonard Chazen, Yale 1963, and presently in the Yale Law School, also worked with the Yale Summer High School News. Mr. Alberto Lau, Yale 1967, kept a photographic record of the school. Mr. Raymond Nunn, Yale 1969, served as Office Assistant.

Mr. Norbert Kelvin, a doctoral candidate in Chemical Engineering at Yale and formerly Deputy Choir Director and Organist at St. Mary Magdelene's Church in Sidney, Australia, played the organ for the Sunday morning services and directed the Yale Summer High School choir.

The office work, including bookkeeping, stenographic assistance to faculty and staff, telephoning, was patiently handled by Miss Gwendolyne Sims and Miss Betsy Korn. Mrs. Judith Hunt assisted in these activities, while serving as secretary to the research psychologists.



## VII. THE YALE SUMMER HIGH SCHOOL COMMUNITY

The presence of students, faculty, tutors, and staff on the small Divinity School campus insured constant informal communication, and this daily contact eliminated many of the problems of larger, formally structured organizations.

Tutors and teachers frequently worked together as teams in order to discover the most effective ways of helping individual students. In order to assist the tutors, most teachers provided them with weekly reports on the students' progress. Each Monday, the entire faculty and staff met to discuss policy questions which had arisen and to bring their collective intelligence and experience to bear on individual student's problems which had resisted solution. In addition, Mr. Wilder, who lived on the campus of the summer high school, worked constantly with teachers and tutors and helped coordinate their efforts to be of assistance to students.

As noted elsewhere in this report, administrative communication with the students for the purposes of scheduling, organizing activities, and clarifying residence hall rules was accomplished through the tutors. In addition, the entire school usually met on Sunday evenings to hear important announcements and to discuss any problems or questions that might have arisen.

On a more personal level, the Director invited every student, in groups of ten, to his apartment in Ezra Stiles College at Yale, for a two-hour open discussion and critique of the school, the courses, the personnel, and anything else of interest or concern to the student. The only staff member present was the Director, and the students were urged to speak freely without fear of their comments being repeated to anyone else.

These private discussions with the students helped the Director to make changes in the 1965 session as the summer progressed and to plan for the 1966 session. These meetings also gave the students an opportunity to participate in the decision-making process and to help shape the program for future years. But most important, they provided the Director with a more comprehensive and precise understanding of what the students thought was happening to them at the Yale Summer High School. This new perspective was of immense value in planning for the 1966 session.

## VIII. THE CURRICULUM IN THE 1966 SESSION

The curriculum for the 1966 session was based upon the conviction that underachieving students, whether from a culturally disadvantaged background or not, need no special kind of subject matter in order to enable them to bridge in themselves the gap between potential and achievement. What is needed most of all is the kind of flexibility which enables a curriculum to mesh with a student's existing interests in or propensity toward certain subject matter and to engage that interest or propensity in such a fashion as will enable the student to build accomplishment upon it. In order to achieve this, the curriculum must challenge, excite, and perhaps push the students harder than they have ever been pushed before.

The fundamental emphasis of the Yale Summer High School was on significantly improving the students' basic verbal and mathematical skills. These are the most valuable skills for students who are going on to college. But the curriculum was expressly designed to avoid attacking skills training head on; we sought instead to achieve that goal indirectly: by capitalizing on the foundation supplied by the student's existing interest, by generating excitement in the development of that interest, and by encouraging the student to understand the need to develop verbal skills of sufficient power to feed and communicate that excitement. We hoped to cultivate within the student the sustenance of effort and patience required to acquire the tools necessary to build the base upon which future advancement might be constructed.

The curriculum was designed to motivate underachieving students to perform at the highest level of their abilities. We sought to attain this goal by offering courses which were innovative in both curriculum and teaching techniques, rigorous in intellectual standards, and taught with enthusiasm and imagination. We encouraged the teachers to experiment with new curricular materials and teaching techniques, and we attempted to determine which materials and techniques were most effective.

The teachers gave no grades or other external rewards. Once the students got over their initial uneasiness caused by the absence of a grading system, they placed more attention on the process of learning itself. The absence of grades forced them to look elsewhere for rewards, and they began to acquire intrinsic appreciation of the process in which they were engaged.

We did have a composition competition, known as the Comp-Comp, and at the commencement exercises awarded prizes for the best entries. A number of other awards were made at commencement but none had been announced in advance. WFF'N Proof was an exception to the rule. This course was organized as a tournament, however, and its purpose was to encourage intellectual competition among teams and individuals.

#### A. THE ENGLISH PROGRAM<sup>12</sup>

The goal of the English program was the development of a good prose style and the ability to read and understand literature. Perhaps the best statement of what we were seeking to accomplish was made by Mr. Charles Church, an instructor in English at the 1965 session of the Yale Summer High School, who wrote:

All human beings, no matter what their IQs or socio-economic backgrounds, share the same fundamental needs and experiences -- loneliness, love, despair, joy, evil and beauty. In this sense all human beings are equal; this might be called their spiritual equality, the only kind that matters, the basis for all other equalities. But all human beings are also unique with unique gifts, unique backgrounds, uniquely specific human experiences. While it is true that men must respect the fact that all men are created equal, it is just as true that men must respect the fact that all men are created different. It should be a primary aim of education to cultivate understanding and respect in both directions, both for the fundamental experiences we all share and for the uniqueness we all possess. As Dr. Butterfield of Wesleyan has written, "Education is learning to love the right things, and the capacity for love is as important as the capacity to know."

---

<sup>12</sup> I am indebted to Mr. Ciochetto for his assistance in compiling this portion of the report.



Literature, in its concrete drama and in the efficacy of its phrasing (i.e., the art that releases that drama), reflects man's struggle to gain insight into himself and his world. In this respect, there is no negative literature; all literature drives one deeper into one's feelings where both joy and sorrow, hope and despair, are revealed. There cannot be the one without the other; there cannot be understanding without the capacity for pain, love without the capacity for loneliness. Thus reading is valuable to be human. Its insight and its art need be its only justification. The attempt to put into words one's own feelings and ideas, to organize them in exposition or through imagination so that they are accurate and clear to oneself and others, is no less an aid to awareness, and need be writing's only justification.

Consequently, an English class is always a study of language, of using language to gain awareness, to learn to love the right things. Writing arises out of reading and thinking and discussion. On the way skills are needed. On the way enrichment takes place. There is no use to separate the two.

The prime job of the English teacher is to motivate the student to read and write by suggesting how literature relates to what his world, his needs, his experiences, his uniqueness, are really about. A teacher does not lecture or preach; rather his task is to take the individual to the right books and show him how to enter them, helping him with some of the artistic signposts for entering their deeper dimensions. Beyond this it is up to the student as an individual to discover that for which he is ready. Consequently it must be the right book for that individual's unique ability, maturity, and encounter with life.

Despite the establishment of common goals and the use of some of the same materials by all teachers, the ten English classes varied purposefully and notably in the literature and techniques of instruction employed.

All classes used Boynton and Mack's Introduction to the Short Story and Perrine's Sound and Sense: An Introduction to Poetry. Because the emphasis of each of the teachers differed, each made from within these two books his own selection of those short stories and poems which were most suitable to his purposes. Each teacher selected from the common library those additional plays and novels that he felt would most completely engage his students in the literary experience; some teachers supplemented that library from private resources. In most cases, the distinction among literary genres was blurred in favor of a unit approach to the literary works selected and organized around a particular theme or concept.

The following descriptions of the approaches to literature employed by the faculty are deliberately generalized in order to highlight the emphasis of each. No teacher used a single technique to the exclusion of all others. Two of them, however, placed their major attention on the language of the literature. Their courses differed markedly: one was designed to reveal how writers consciously structured language to convey their experiences of the world, and the other was shaped to demonstrate how the use of language often structures the experience itself. The first teacher placed his emphasis upon communication; the second, upon ways of seeing. A third teacher structured his course around a single ethical problem and selected literary works in which that problem was variously treated. Most of the works demonstrated conflict between what a man thinks he believes and the manner of his action. A fourth teacher emphasized differing treatments of the same experience in several works of literature with special attention to the variations necessitated by the limitations of each form. Emphasis on the devices of literature and the vocabulary of criticism was central to the approach of a fifth teacher, while the sixth concentrated almost exclusively upon how to read and experience a literary work.

The composition course, for the most part, emphasized student experience both in and out of the classroom. Pursuant to the express goals of the English program, the faculty sought to encourage students to recognize that the two kinds of experience were not separate but very much related to each other. Expository prose, rather than sentence analysis, was the device used to achieve this recognition. When attention was directed to sentence structure, vocabulary development,

and other language skills, it was always in the context of the student's writing and its relationship to the readings of the course. Most students wrote every day, often both in and out of class. These daily pieces were usually of paragraph length and were about some aspect of the summer high school or of the classwork. Longer papers, ordinarily 400-500 words in length, were assigned over the weekends. Major attention was given to paragraph diction. In the longer papers transitional devices and various kinds of structural modification were stressed.

Common to most of the English classes was the use of directed class discussion. Because classes were small, every student had opportunities to express his views several times on each day's writing and reading. It was frequently possible to utilize these discussions in developing the techniques of oral composition.

Although no classes conformed to the following schedule in its entirety or in the exact order or proportion shown, the schedule was used as a guide and includes most of what was covered in the English course. (There were approximately six weeks of classes, each class meeting six days a week for a 70-minute period.)

| WEEK | COMPOSITION                                                                                                                                                                                                                             | LITERATURE                                                                                                                                                                                                                                                                                                                  |
|------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| I    | <p>Introduction to the course, stressing its rationale, expectations, etc .</p> <p>Daily writing of "experience" paragraphs -- topic sentence or topic idea.</p> <p>Weekend theme: Longer paper, some phase of personal experience.</p> | <p>Emphasis on what literature is, with illustrations from <u>Short Story</u> and <u>Sound &amp; Sense</u>.</p> <p>Introduce and assign first novel.</p>                                                                                                                                                                    |
| II   | <p>Daily paragraphs on either personal experience or the course reading. Emphasis upon the importance of time and of details. Work with transitions of time.</p> <p>Weekend theme: Analysis of passage from the novel.</p>              | <p>Class examination through discussion of first novel.</p> <p><u>The Bear</u><br/> <u>The Old Man</u><br/> <u>The Assistant</u><br/> <u>The Pearl</u><br/> <u>The Adventures of Huckleberry Finn</u><br/> <u>The Bridge of San Luis Rey</u><br/> <u>Go Tell it on the Mountain</u><br/> <u>The Old Man and the Sea</u></p> |



III Daily paragraphs with emphasis on brief summaries. Attention to book and theatre reviews in Newsweek. Emphasis on diction. Weekend theme: Critical book review.

---

IV Daily paragraphs of description based upon observation. Weekend theme: Problem solving as a technique for organization.

---

|   |                                                                                                                                                                 |                                                                                              |
|---|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|
| V | Daily paragraphs emphasizing logical order and point of view. Continued stress on transitional devices. Weekend theme: The individual in or opposed to society. | Continue drama.<br><br><u>Raisin in the Sun</u><br><u>All My Sons</u><br><u>The Crucible</u> |
|---|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|

---

|    |                                                                                                                                                                           |                                           |
|----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|
| VI | Daily writing -- cause and effect -- emphasis upon subordination, relationship of parts of sentence. Long theme: contest essay on the Yale Summer High School experience. | Emphasis on poetry.<br>Review literature. |
|----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|

---

In order to promote the idea that the courses in English were only a part of the larger program of the Yale Summer High School, the English staff found ways to call attention to other aspects of the program and to demonstrate their relation to the work of the English classes.

On the morning before the students were to see the Long Wharf production of Miller's The Crucible, a panel of teachers and tutors gave the students a briefing on some of the things to look for in the play and some of the techniques of intelligent play-viewing. During one-half of each of that day's English periods, the students met in the school auditorium for a presentation prepared by Mr. Wilson, Mr. MacDonald, Miss Dawes, and Dane Archer.

To prepare the students for the Stratford production of The Taming of the Shrew, Mr. Church and Miss Dawes gave a preview of the production and did some of the Petruchio-Katherine scenes.

The Comp-Comp, the end-of-the-term essay contest, was conceived by Mr. Ciochetto and Dane Archer. Ten winners were chosen, each of whom received a book prize. In addition, the writers of the top three essays received a cash prize. The prizes were furnished by the School and the judging of the essays was done by the English staff with assistance from Dane Archer and Trevor Cushman.

Two of the English teachers, Mr. France and Mr. Ciochetto, along with tutors Frank White, Trevor Cushman, and Jonathan Culler, participated in a joint teaching project with the teachers and tutors of the Connecticut College Summer Program in the Humanities.<sup>13</sup> Each teacher and tutor team was given a class of an equal number of boys and girls, and each team taught the Richard Wilbur poem "Advice to a Prophet" in its own way. The idea was conceived by Mr. William Meredith, Director of the Connecticut College program, as a method of bringing the boys and girls together in a situation markedly different from the traditional mixer.

Miss Dawes involved administrative staff, teachers, and tutors in her dramatic productions and, as part of the final week's activities, presented to the entire school scenes from Miller's All My Sons and Hansbury's Raisin in the Sun, and an original adaptation of James Thurber's short story The Catbird Seat. With Mr. Church, Miss Dawes also did some team-teaching, which consisted of two different ways of presenting the final scene of All My Sons in order to let the students decide which ending of the play was most appropriate. Miss Dawes used the students from her class for the project.

The English faculty selected the movies for Saturday night student viewing. Three of the movies, A Raisin in the Sun, Intruder in the Dust, and Billy Budd<sup>14</sup> were chosen specifically to complement the English curriculum.

---

<sup>13</sup>See page 60 infra.

<sup>14</sup>Mr. Richard Sewall and Mr. Edward J. Gordon gave most generously of their time and knowledge in assisting in the design of the English program and their contributions were both critical and invaluable.

## B. THE MATHEMATICS PROGRAM<sup>15</sup>

Because of the differences in preparation and ability among the boys, the mathematics program was divided into two levels, and each boy was enrolled in a course at that level which best suited his talents and proclivities. The Cooperative Algebra I Examination of the Educational Testing Service was used for placement purposes: students scoring at least 26 out of 40 were placed in Level II; those with 20 or fewer correct were placed in Level I; those who scored between 20 and 26 were evaluated individually. All answers were analyzed and each student was polled in order that his own assessment of his achievement and ability could be taken into account.

At Level I the work centered on the foundations of algebra. Most of the boys had taken an Algebra I course, and some had already had two years of algebra. But the preliminary test, as well as subsequent class work, demonstrated that fifty-five boys -- about 50% -- would profit most from a course that really started at the beginning. This is certainly not to be considered a condemnation of the courses available to them in their own schools, as many of them had done poorly -- in the C and D Range. Others had not taken a year's course in algebra but had instead spent their tenth grade time studying a geometry that was wholly synthetic, and devoid of algebraic demands. Neither can their poor performance on the placement test be ascribed to their unfamiliarity with the "New Mathematics". Although the test does contain some recent trends and emphases, it rests primarily on traditional techniques and concepts.

Level I was divided into four heterogeneous sections. This was done both for experimental reasons and in order that members of the teaching staff might be more readily available for individual work in tutoring sessions if the weakest students were divided among all of them. During the course of the summer, the staff decided to institute for those ten students with only the slightest mathematical foundation a supplementary remedial arithmetic and number patterns session which met on a semi-compulsory basis twice weekly.

---

<sup>15</sup>I am indebted to Mr. Cohan for his assistance in compiling this portion of the report.



The four sections of Level I employed different materials and techniques as follows:

Section A used a standard lecture-discussion-problem-solving approach drawing upon the School Mathematics Study Group (MSG) First Course in Algebra through the first thirteen chapters. Such topics as the real number system and truth sets of open sentences, including inequalities, were dealt with, but neither systems of equations and inequalities nor quadratic polynomials were reached.

Section B was based upon the MSG Programed First Course in Algebra, which parallels the non-programed First Course. The programed material was used much as a regular test; a minimum of self-pacing resulted. Class sessions were built around the lecture-discussion-problem-solving approach, and the material included was approximately the same as that in Section A.

Section C also used the MSG Programed First Course. Here the emphasis was on self-pacing. Four sessions a week were devoted to individual work: reading, tutorial work, or test-taking. If a student progressed at a minimally acceptable pace, he was not required to attend the sessions devoted to individual work. Nevertheless, an average of more than two-thirds of the boys came on days when they were not required to do so. Tests were given on each chapter and the results were the criterion for moving on to the next chapter. Failure to obtain 80% on the test resulted in a tutorial session with the teacher followed by retesting until the desired standard was achieved. Different boys completed from eleven to eighteen of the twenty-four chapters of the full course with a large majority finishing at least thirteen chapters. Two days of each week were spent introducing supplementary material or discussing difficult concepts with the entire class.

Section D used materials arranged by the instructor himself. The approach was a semi-programed one in which the MSG First Course was supplemented with worksheets especially prepared for an individual when he appeared to need work on a particular topic. During many class periods the teacher tutored individual students while the others worked at their texts or worksheets.

To evaluate differential results of the various approaches employed in the Level I course, the Cooperative Test, in an alternative form to that given earlier in the session, was administered to all students. In addition the students took the Preliminary Scholastic Appitude Test (PSAT) both before and after the 1965 session, and the scores on the quantitative

material were compared.<sup>16</sup> These tests are not precisely based upon the material studied.

Level II was designed for those boys whose foundation in algebra was adequate to undertake more challenging work than that in Level I. Such students had a choice among the three following courses:

1. Modern Coordinate Geometry: This course was based upon a Wesleyan Experimental Curricular Study, "Modern Coordinate Geometry", which was used as an organizing base rather than as a student text. Semi-programed worksheets were the mainstay of the classroom work. Dealing with fairly sophisticated material, this course included linear programming, affine properties of plane figures, the function concept, and extensive work with systems of equations. The student response was most encouraging, and warrants some refined experimentation with respect to both the content and the methodology employed.

2. Computer Science: This course was designed to teach computer programming and to familiarize students with the functions of computers. They were taught MAD, one of the mathematical languages used to program and solve problems on the Yale computers. Over the course of the summer, the students followed a flexible weekly schedule of training and practice involving the following topics: 1) introduction to MAD and the machines; 2) programming and more MAD; 3) logical operators, bit structure of words, manipulation of symbols and matrices; 4) executive systems, languages, translators and monitors; 5) SNOBOL and problem-solving; 6) individual projects. During the last week, student projects covered such topics as word-count frequency, message-coding and decoding, tic-tac-toe, areas and perimeters of arbitrary triangles, WFF'N Proof problems, temperature translations between scales, and seven-chance probability on dice.

In general the students' response was extremely gratifying. Twelve or fourteen of them achieved unusual success in the program, and one, who unquestionably has a future in the field, performed with brilliance. Some students performed less well because they had not previously been habituated to the level of abstract thinking and self-discipline required by the subject.

---

<sup>16</sup>See page 80 for the report of the research team on this point.

3. Topics in Advanced Algebra: Three units -- the first two drawn up by the instructor -- were designed to illustrate the relationship between the inductive and the deductive processes in mathematics. The first unit stressed self-discovery -- the inductive approach -- centering on the topic of sequences and series. The second unit employed the discoveries of the first unit in student demonstrations of their validity. At this point, the method of mathematical induction -- a deductive technique -- was explored thoroughly. The last unit was based upon An Introduction to Inequalities by Beckenbach and Bellman (New Mathematical Library, SMSG). While providing a firm grounding in inequalities and their application, this book illustrates the advantageous application of both inductive and deductive thinking to mathematics. This monograph, however, proved somewhat difficult for all but the best students and cannot be recommended for use at this level without considerable modification by the instructor.

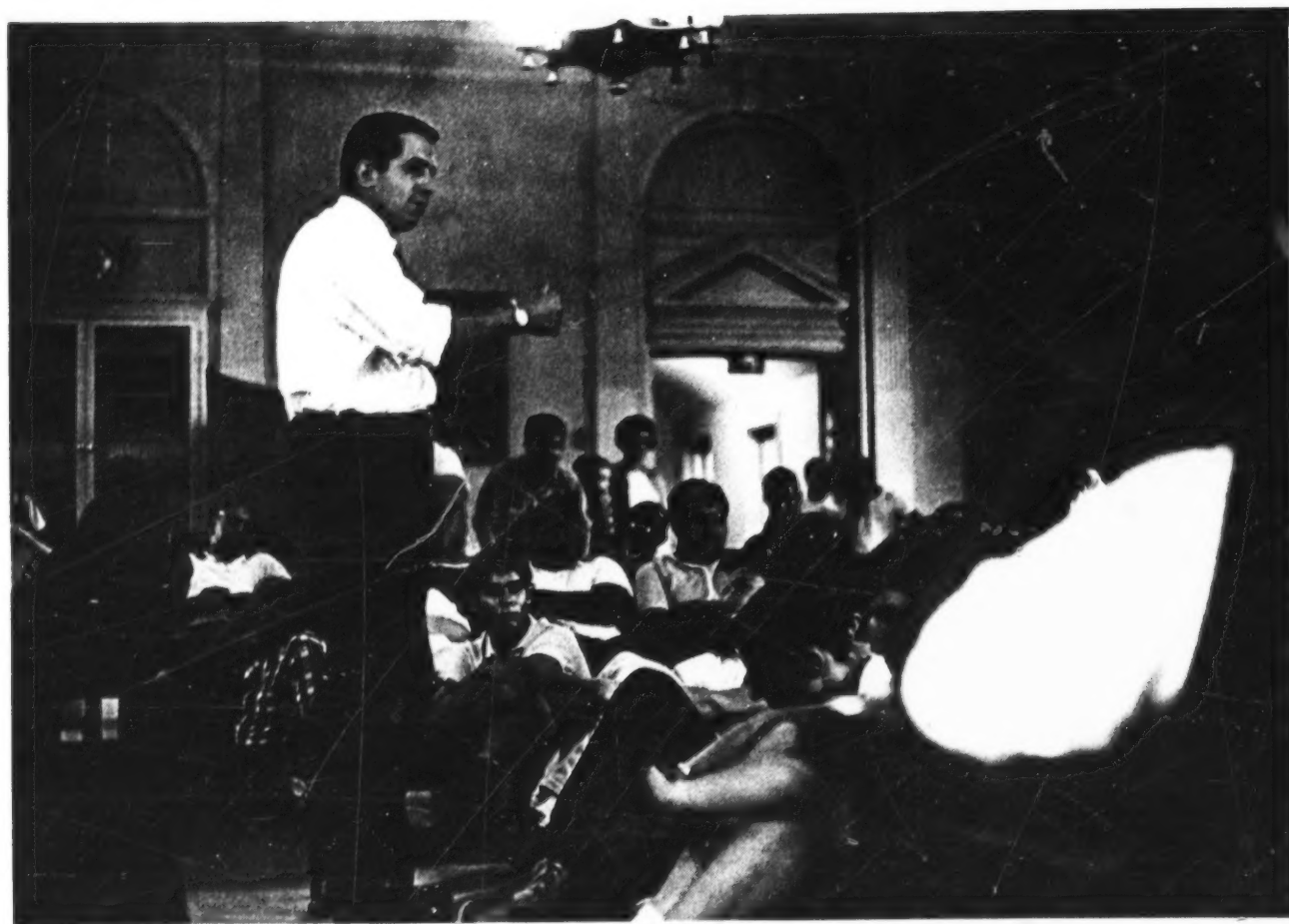
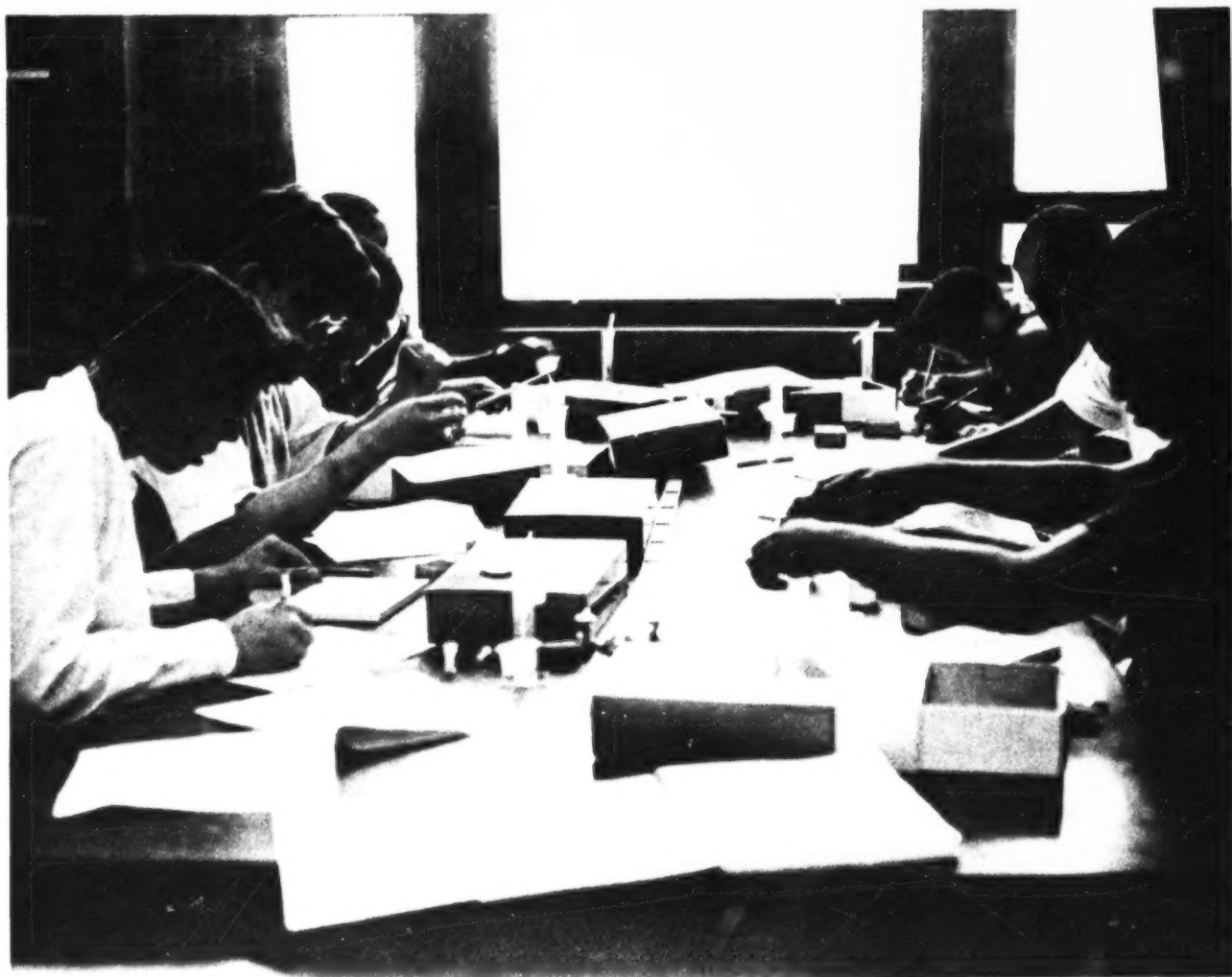
For the students returning for their second session at the Yale Summer High School, the mathematics department instituted voluntary bi-weekly seminars which were attended regularly by half of those eligible. Sawyer's What is Calculus About? (New Mathematical Library) provided the jumping-off point for an introduction to calculus.

The Mathematics program as a whole was designed to impart competence, both in concepts and techniques, and to arouse a sense of excitement about mathematics and the possibilities for creativity that it offers. Of course, these are related goals, especially in a program like the Yale Summer High School. Skills set the stage for intrinsic fascination which, in turn, nurtures desire for greater skills. Nevertheless, these two -- competence and excitement -- can logically be separated. In retrospect it appears that during the 1965 session the department emphasized competence -- mastery of concepts and techniques -- in Level I, and reversed the balance to some extent in Level II courses -- introducing exciting topics and approaches without insuring the competence necessary to master these topics. The experience of 1965 should make it possible to achieve a better balance in the future and perhaps to offer some experimentally based evidence to the larger educational community.<sup>17</sup>

---

<sup>17</sup>I would like to express to Mr. Charles Rickart, Professor of Mathematics at Yale, my appreciation for his generous assistance in the design and implementation of the Mathematics program. My gratitude goes also to Mr. Morris Davis, Director of the Yale Computer Center, for his understanding cooperation in making possible the full-scale course in Computer Science.





### C. TIME, SPACE, AND MATTER

Twenty of the students at the Yale Summer High School were offered the Time, Space, and Matter course developed at the Princeton University Secondary School Science Project. Two decades were arbitrarily assigned to this course in order to provide the staff with a means of comparing the achievement of students who participated in the WFF'N Proof course with that of those who did not.

This course, empirical in its approach, was designed to teach the methodology of science. It induces the students to learn through experiments which often parallel the actual experiments which led to scientific discoveries and new understanding of various aspects of nature.

The course itself, however, cannot be judged fairly on the basis of the trial given it at the Yale Summer High School. The students enrolled in the course had not elected it; they had been assigned to it as a control group. If students with an interest in science had been allowed to choose the course, its success or failure could be evaluated much more accurately. Some limited judgments are nonetheless possible. The methodology of the course is sophisticated and inherently exciting, but the subject matter and the concepts developed were not intellectually challenging to a majority of the boys enrolled in it. The course is flexible and imaginative, and has enough substance to it to be subject to adaptation for a homogeneous group of able students. However, the materials presently available do not appear suitable for students above the junior high school level.<sup>18</sup>

### D. SPEECH

Each student had one class each week in speech. This course, conducted in sections of ten students each, included work in diction and proper voice usage. The students also had the opportunity to give at least one major extemporaneous speech.

It was found, however, that some of the students either had already had speech training prior to attendance at the Yale Summer High School or alternatively would be able to obtain it on return to their own high schools.

---

<sup>18</sup>Further information can be obtained about this course by writing to the Secondary Schools Science Project, Department of Geology, Princeton University, Princeton, New Jersey.

Consequently, this course will be offered to only some of the students in the 1966 session, and assignment to it will be made on the basis of a speech diagnosis completed early in the session.

#### E. STUDY SKILLS <sup>19</sup>

The study skills course was a modified version of the one offered to Yale freshmen by the Yale Office of Study Skills. This program is aimed at teaching the student the skills necessary for successful academic performance. It is designed to increase the student's rate of reading and level of comprehension and to provide him instruction in the basic study skills, including the following:

- a) Note-taking from both lectures and reading assignments
- b) Techniques of reading an assignment
- c) Preparing for and taking examinations
- d) Scheduling of time
- e) Concentration and the conditions for study
- f) Learning and remembering
- g) Critical reading

Each student received a copy of Preparing for College Study (Fedde, Reader's Press, 1961) which deals in detail with each of these skills. During the course, students read the entire book with the exception of those short sections dealing with academic writing and the use of the library. In addition, each skill was made the main topic of discussion in class and was examined rigorously. Students were encouraged to practice these skills in the context of their mathematics and English courses at the Yale Summer High School.

Students took the Brown-Holtzman Survey of Study Habits and Attitudes; their profile, revealed to them the differences between their study habits and those of students known to achieve high grades. These comparisons were discussed in class by the instructor, and the tutors analyzed the profiles with each of his students.

---

<sup>19</sup>I am indebted to Mr. Milsten for his assistance in preparing this portion of the report.



Reading was also assigned from College Reader (Wedeen, Putnam, 1958). This book contains selections from fifty college textbooks of a variety of disciplines. Exercises in this book contributed to the achievement of three objectives: a) practice in the technique of reading an assignment; b) practice in building up speed and comprehension; and c) introducing the students to the various disciplines encountered in college work. In addition students read articles appearing each week in Newsweek for practice in speed and retention.

To increase reading speed and comprehension in class, the instructor used controlled fixation reading films projected on the Perceptual Development Laboratory's "Perceptoscope". As a supplement to this, the Educational Development Laboratory's "Controlled Reader" was also employed. All reading in and outside of class was followed by tests for comprehension.

## II. ANALYSIS

The first week of school, Form A of the Yale Freshman Year Reading Test was administered to determine the reading and comprehension rates of each boy. Form B of the same test was given during the last week to measure the improvement in reading ability. Form B is comparable in structure and difficulty to Form A; both consist of two parts. Part I contains a 6 1/2 page article followed by 20 questions designed to measure comprehension. Part II contains several short selections, each followed by questions. Form B was taken under the same conditions as Form A, with the exception that the boys were allowed to survey the article at the rate of 900 words per minute before actually reading it. Survey was a technique that had been taught in class and which the students were urged to employ before reading any textbook assignment. The following results indicate distinct improvement in speed and comprehension:

|            | "RxR"       | x/30 | % improvement on "RxR" scale |
|------------|-------------|------|------------------------------|
| Division A | 3774        | 18   | 58                           |
|            | <u>5928</u> | 21   |                              |
| Division B | 2288        | 14   | 100                          |
|            | <u>4434</u> | 18   |                              |
| Division C | 1008        | 11   | 209                          |
|            | <u>2723</u> | 13   |                              |

The "RxR" figure is based on Part I of the test. Measuring both the rate and the level of comprehension, it is obtained by multiplying rate times comprehension. It is meaningless to talk in terms of either rate or comprehension singly, since a very fast reader may understand nothing and a person

who has good comprehension may read word by word. The figures shown above are the averages for each division. The figure without underlining is from the Form A test and the one with underlining from Form B. The higher the figure, the better the score.

The x/30 figure is based on Part II, and represents the average number of correct answers out of a maximum of thirty. Only comprehension is measured in Part II of the test.

The % improvement figure is the average improvement for each division on Part I of the test. As anticipated, the poorest readers showed the most improvement during the course of the summer.

The data for all boys without regard to division is shown below:

| "RxR"       | x/30 | % improvement on "RxR" score |
|-------------|------|------------------------------|
| 2252        | 14   | 122                          |
| <u>4361</u> | 17   |                              |

Finally the number of students falling in the various ranges of "RxR" figures for Forms A and B is as follows:

| <u>Range</u> | <u>Form A</u> | <u>Form B</u>     |
|--------------|---------------|-------------------|
| 0-1000       | 17            | 3                 |
| 1001-2000    | 29            | 6                 |
| 2001-3000    | 36            | 20                |
| 3001-4000    | 16            | 21                |
| 4001-5000    | 6             | 18                |
| 5001-6000    | 3             | 16                |
| 6001-7000    | 0             | 10                |
| 7001-8000    | 0             | 3                 |
| 8001-9000    | 0             | 4                 |
| 9001-10000   | <u>0</u>      | <u>1</u>          |
|              | 107           | 102 <sup>20</sup> |

Although it is not possible to demonstrate statistically the merit of the non-reading study skills portion of the course, it is almost certain that the students' abilities in this area have been sharpened. In fact, many students felt that this part of the course, which consumed at least half of the class time, was more helpful than the reading instruction.

<sup>20</sup>Five of the students were unavailable for the administration of Form B.

The entire course was considered by the students to be of immense value to them. If they practice the skills taught, improvement can be permanent. The practical benefit of this course lies in its effectiveness in enabling the students to approach other courses with greater ease.

#### F. THE TUTORS' SEMINARS

The seminars were designed to enable the tutors to capitalize on their roles as personal models worthy of emulation in order to stimulate the interest of the students in intellectual development. Twelve seminars were offered in all: eleven tutors taught seminars of their own and two tutors joined forces to offer a twelfth.

The approaches were as varied as the topics of the seminars. Some tutors assigned a good deal of reading, and then discussed the assignments in class. Others required written evaluations of the reading assignments. Still others required the students to write creative works, either poetry or prose. But common to all the seminars were the thorough, intensive discussions during the class periods.

During the last week of the program, questionnaires were distributed to all students, and anonymity in completing them was assured in order to elicit the most honest responses possible. There is very little doubt, if the questionnaires reflect the students' attitudes accurately, that they benefited immeasurably from the seminars.

The seminars taught in the 1965 session were as follows:

1. Foreign Affairs (Frank White): This seminar focused on the problem of decision making in foreign affairs. It employed hypothetical and real problems, illustrating the clash between morality and Machiavellianism, and considered in detail the elements to be harmonized in the making of decisions on such specific foreign policy issues as the Sino-Soviet split, South Africa and Viet Nam. Drawing on their experience in the making of decisions with respect to their own lives, members of the seminar wrote a four-page paper proposing for the United States a long-range foreign policy which could be used as a basis for day-to-day decisions. Open discussion was the rule, and guest speakers frequently attended. There was little reading or formal teaching.

Bibliography: Nuclear Weapons and the Conflict of Conscience, Herz

2. Race and Revolution: North and South (Don Ogilvie and Frank White): The main goal of this seminar was to give the students a forum to sharpen and refine their ideas on race relations. In reaching the objective, two general



approaches were utilized. First, sixteen students from diverse geographical, social and racial backgrounds were brought together in order to achieve new perspectives through exposure to a whole spectrum of opinions; and secondly, the problem of race relations was discussed in the context of an analysis of American society as a system and an exploration of the modes of change -- revolt, revolution, reform, evolution. It was intended that the latter approach would lay the base for objective and analytical thinking about the subject matter. Through completely uninhibited discussions, the students themselves derived definitions for the concepts involved. The seminar included an assignment of one paper on poverty, and valuable discussions with guest speakers during the last weeks.

Bibliography: The Other America -- Michael Harrington

3. Moral Philosophy (Perry Link): The goals of this seminar were first, to habituate the boys to the analytical approach of philosophy and to give them a working knowledge of the field of ethics. Study sheets, prepared by the tutor, posed hypothetical situations involving moral problems. Answering the questions, the students were always challenged with "why"; the tutor then proposed counter-arguments supporting an amoral stance; answers were refined; and later in the session moral solutions were compared with those of Kant. The seminar used free discussion guided, but not directed, by the tutor. A short written exercise for each session, readings in Kant, and one longer paper were assigned.

Bibliography: Selections from Lectures on Ethics, Kant

4. Shakespeare (Merle McClung): This seminar was designed to involve students in the issues presented in four plays by Shakespeare. The group spent three sessions on each play and concentrated on one central problem in each, but also made comparisons among all the plays studied during the summer. The tutor in order to provide background knowledge quickly, used mimeographed sheets, which contained controversial and contradicting criticisms by Shakespeare scholars. There was some attempt to draw parallels to contemporary problems and some use of dramatic readings by students, but most of the work dealt with the texts themselves. The group also took a field trip to New York to see the New York Shakespeare Festival Coriolanus.

Bibliography: Measure for Measure, Coriolanus, Othello, and Henry IV.

Selections from Harbage, Van Doren, Rossiter, Campbell, Farnham, Bradley, Jorgensen, Shaaber, and the Shakespeare Quarterly.

5. Contemporary Life as Seen Through the Arts (Dane Archer): This seminar, utilizing both creative writing and close reading, examined four modes of

artistic expression -- modern poetry, modern drama, contemporary art, and photography -- in an attempt to impart a broader understanding of the world along with an awareness of some of the many different means of perceiving it. A field trip to New York City, designed to illustrate both beautiful and sordid aspects of metropolitan life, focused many of the divergent themes touched upon by the seminar.

Bibliography: (1) Modern Poetry:

Lawrence Ferlinghetti  
Karl Shapiro  
Allen Ginsburg  
Dylan Thomas  
Denise Levertov  
Randall Jarrell  
Archibald MacLeish  
Virginia Woolf  
Yevgeny Yevtushenko

(2) Modern Drama: Edward Albee: Who's Afraid of Virginia Woolf?

(3) Modern Art: Guggenheim Museum Field Trip  
Yale Art Gallery

(4) Photography: Traveling Exhibits on display at the Yale  
Summer High School campus<sup>21</sup>  
Yale Art and Architecture Building

6. The Emerging Nations (Ernest Attah): This seminar was designed to give students a general introduction to the new nations of Africa, their history, and their contemporary problems. It surveyed pre-colonial African society, Colonialism, and Independence, and concluded with a discussion of African Socialism, modern nationalism, and Pan-Africanism. Readings in articles and books were extensive, and, chiefly as a result of the students' limited acquaintance with this subject, most class time was occupied by lectures. One paper, dealing with the future of the emerging nations, was assigned.

Bibliography: Ideologies of the Developing Nations, Sigmund

---

<sup>21</sup>The Yale Summer High School staff is greatly in the debt of Thomas K. Edwards for procuring and mounting these exhibitions.

7. Introduction to Classical Music (Trevor Cushman): The aims of this seminar were to introduce the students to classical music and to help them understand and appreciate it. There were three topics considered by this seminar: means of making music; forms of music; and the meaning of music. Lectures were necessitated by the novelty of classical music to the students. The only assigned reading consisted of comments and analyses prepared by the tutor. The emphasis was clearly on listening: the students heard some forty selections, and attended several of the Starlight Concerts in New Haven.

Bibliography: Coriolanus Overture; Overture to Il Signor Bruschino; Swan Lake; Billy the Kid; Dvorak's Cello Concerto; Haydn Symphonies, Beethoven's Third, Fifth and Ninth Symphonies; and four examples of the Romeo and Juliet theme: Berlioz, Tchaikovsky, Prokofiev, and West Side Story. (These are examples; many more were used.)

8. Personal Values (William Torbert): This seminar tried to help students discover the values they implicitly relied upon as a basis for their behavior. The approach varied between the directive and the non-directive, with the tutor attempting to shift to the students as much of the initiative in the discussion as possible. Readings were assigned during the first three weeks, and each session was taped in order that students might ponder them during the last half of the course. Homework was voluntary, though three of the ten students chose to have it assigned.

Bibliography: Profiles in Courage, Kennedy  
Young Man Luther, Erikson  
Thought Reform and the Psychology of Totalism, R.J. Lifton

9. Modern Poetry (Johnathan Culler): This seminar was predicated upon two propositions: first, that poetry can be vital, relevant, and irreverent; and second, that one understands poetry not by "reading between the lines" but by reading the lines -- the words -- themselves. Two or three poems were studied in detail at each session, with particular attention to images and their implications. Each student led the seminar once, focusing on a poem of his own choice; and each student wrote a paper comparing two poems by the same author.

Bibliography: Dylan Thomas, e.e. cummings, Gerard Manley Hopkins, W.B. Yeats, Wallace Stevens, Allan Ginsburg, Richard Wilbur, and William Meredith (who appeared in person.)

10. An Introduction to Plato (Allard Allston): Because there was not enough time to begin to deal exhaustively with this subject, the tutor prepared his own analyses and summations, duplicated them, and used them as supple-



ments to class lectures. This seminar considered Plato's Theory of Ideal Forms, his political philosophy, and the structure of his writings.

Bibliography: Readings in Dialogues and The Republic, Plato

11. Introduction to Art History (Richard Gerard): This seminar surveyed the recent history of art, with special attention to the modern painters, and used slides, field trips, and student painting to achieve its goal.

12. Modern Science and Society (Bunli Yang): This seminar considered the relationships between science and society, emphasized that they are not distinct realms, and explored in some detail the extent and manner in which each impinges on the other. This was achieved through lectures and discussions on a variety of topics, including relativity and quantum mechanics.<sup>22</sup>

### G. SYMBOLIC LOGIC

Logic is both a branch and tool of philosophy. It accomplishes for language the task that both algebra and geometry perform for mathematics. Logic substitutes letters for sentences just as algebra symbolizes numbers by letters; and, like geometry, logic provides rules for transforming arguments into strict proofs. Thus, if a tenth grader can master elementary mathematical disciplines, he should be able to grasp introductory formal logic. The "New Mathematics" already recognizes this principle and grounds the teaching of high school mathematics in elementary logical concepts.

Most American students are introduced to symbolic logic, if at all, when they enter college or graduate school. Why then include logic in a curriculum for tenth graders? Part of the answer lies in the experimental mission of the Yale Summer High School -- its desire to employ and evaluate still unproved approaches to secondary school education.

High school students today seem more than ever before emotionally disposed to question the most elementary assumptions of the society. Logic is indispensable as a tool in such inquiry, but, perhaps more important the certainties which it claims to provide and the paradoxes with which it deals can often goad the alert student into ever more rigorous application of his mental powers and ever more profound understanding of the problems which pursue him.

---

<sup>22</sup>I am indebted to Frank White for gathering materials included in this section on the tutors' seminars.

WFF'N Proof,<sup>23</sup> the device employed by the Yale Summer High School to teach modern logic, is a game of skill and reasoning. More than that, it introduces, in a positive way, the element of competition in matters of the intellect. If a student's competitive instincts can be stimulated with respect to the intrinsic exercise of his mind, without employing extrinsic grade symbols of success, an important avenue for educational innovation might be opened.

Essentially WFF'N Proof consists of inductive and deductive procedures that are projected and learned by a physical representation of the principles of formal logic. Built upon specific procedural rules for developing logical proofs, the set of games is played with thirty-six, small, lettered cubes which symbolize various sentence variables and logical connectives. WFF'N Proof consists of twenty-one subgames, each requiring the mastery in succession of more difficult plateaus of understanding.

Played competitively, WFF'N Proof, because it teaches the players procedures for arguing their case if they spot a mistake in a play made by one of their competitors, has some of the virtues of debating. A player makes a mistake either by playing a letter-cube when he might have avoided doing so, or by setting a goal for which no proof can be constructed with the letters available. It is also a mistake not to notice a mistake that has been made previously. If a player makes a mistake, anyone playing may challenge him, and he must defend his move or lose a point on the hand. In the latter event, the challenger wins a point and a new hand starts. A player who challenges incorrectly may be counter-challenged.

This past summer, ninety per-cent of the student body at the Yale Summer High School -- about one hundred students -- met every day for an hour and a half to learn logic and to play WFF'N Proof. These periods were divided into two equal parts. During the first part, half the class sat in tables of three and played WFF'N Proof in tournament competition while the other half received instruction on the logical principles which underlie the game. The two groups switched rooms midpoint in the period..

---

<sup>23</sup>Professor Layman Allen of the Yale Law School, who invented the game, supervised the WFF'N Proof course at the Yale Summer High School. His help was indispensable to the success of this part of the instructional program.

For the tournament, the students were assigned to teams, of which each was roughly equal to each of the others with respect to intellectual ability. There were thirty tables of three and the "seeding" was determined according to tested ability. Because of the spread of talent in each team, members of a team played at different tables throughout the ladder of thirty. Scores were compiled daily and were recorded in a mimeographed bulletin. Each team elected a captain, and teams scoring consistently well over the whole summer were awarded prizes.<sup>24</sup> Each day the high scorer at a table moved up to the next higher table, the low scorer moved down, and the middle man remained in place. This procedure was designed to cause players to migrate to their own level of ability so that competition would be keen at all levels of the ladder. One of the teachers roamed around during play both to answer questions and to settle disputes.

The class sessions, held in a large common room, resembled nothing so much as a three-ring circus. The teaching staff for these sessions included six interested tutors. The students could choose to attend one of several blackboard drill sessions -- of which each concentrated on one of the eleven logical rules needed for the full game, to play practice games with one another, to read from the manual that accompanies the game, or to take a test on one of the rules they had mastered. The tests included a proof using all the rules the student had learned to date, a problem involving translation from English into logical symbols or vice versa, and a hypothetical game situation. The student was encouraged to move at his own speed and to choose his own approach to learning the material. Passing tests added points to the team score, and once a week the teams met for a skull session in order to discuss strategies and to help each other with advice and instruction.

The basic assumption underlying this arrangement is that learning logic in a stimulating and enjoyable atmosphere will result in more favorable attitudes toward the subject matter. If hard thinking is embodied in a game situation, the students will be more likely to make a habit of it. The competitive aspects -- tournament, teams, points, prizes, and bulletins -- were added to stimulate interest and motivation to even higher levels.

The students were asked to write down their responses to the logic program and to its organization. Most of them said that they enjoyed the experience, but even those who did not appreciated the discipline of being

---

<sup>24</sup>The fact that prizes were to be awarded was not announced in advance.



made to concentrate and to focus their thinking. Some of the brighter students were able to pursue connections between the logic course and their work in mathematics and computer techniques. One boy designed a computer program that would allow the computer to recognize WFF's so that it could almost play the first game. On the other hand, some gifted students expressed no interest in this kind of thinking. Others, especially those who did not master the game as quickly, felt very uncomfortable in the intensely competitive atmosphere that developed in the games, and at the lower tables apathy tended to reinforce itself. In the future, because the Yale Summer High School students will be given a greater choice of course within the curriculum, the logic class will be available to only half the student body. Only those who express an interest in the subject will be assigned to it. Homework, which will have nothing to do with the tournament, will take the place of class tests so that the students will have more time in class to benefit from the teaching. The tutors will again be invited to volunteer for teaching. A system will be devised to award to a player winning a game with a more complicated proof more points according to the difficulty of the proof. Finally, Mr. Allen is developing a new game on Set Theory and we will include this in the course as well.<sup>25</sup>

---

<sup>25</sup>I am indebted to Thomas R. Holahan, an instructor in the WFF'N Proof Tournament, for his assistance in preparing this section of the report.

## H. THE DIRECTED STUDIES SEMINAR FOR RETURNING STUDENTS

In planning for the 1965 session, it became clear that several gifted students who had attended the 1964 session would not, without another summer of intensive work, be likely to reach their highest level of intellectual achievement.<sup>26</sup> Consequently, we decided to bring back a small number of such students for a seminar taught at the level of an advanced undergraduate course in Yale College. We believed that the discipline of close study, coupled with the opportunity thereby made available for knowledgeably creative work, would afford them the best possible preparation for a superior college education. The Directed Studies Seminar of the Yale Summer High School was therefore established and was scheduled to meet four hours daily in two sessions. These periods constituted the only formal class requirement for the participating students.

The specific course was conceived with two primary objectives in mind: first, to acquaint the students with the excellence and richness of classical Greek literature and philosophy; second, to develop basic skills in the interpretation and criticism of written texts. Materials were selected so as to call attention to the variety of purposes and values which a written text could embody. Readings included the epic, comedy, tragedy, philosophic dialogue, and treatise.

In the early weeks, attention fell naturally on the Iliad and the Odyssey. The advantages accruing from such a beginning include more than historical antecedence; the poems relate exciting and adventurous tales rich with characters, situations, and effects. Questions about form, organization, and literary devices arise naturally from the students' interest in the unfolding story. During the first weeks of the seminar, students kept a daily journal in which they recorded their continuing encounter with the primary texts and attempted to develop some sense of the works as a whole.

Both epics are sufficiently complicated that the journals provided a useful way of organizing a continuing understanding of details of plot and portrayal. For some students, the journal was a first occasion for extensive note-taking and analysis; for those with a better background,

---

<sup>26</sup> We purposely chose not among the best of the 1964 students, but those who stood roughly in the second, third and fourth tenths of the 1964 student body.

the journals became more personal and imaginative in expressing response as well as comprehension. For both groups, writing three pages a night was valuable practice.

The journals were also designed to provide for experimentation with a variety of analytic techniques. We approached the primary works not only as literature, but also as written evidence of a period in history; as celebration of certain human values and virtues; and as a presentation of certain forms of political and social life. To supplement class discussion, the students read in secondary sources concerning the historical and literary background of the epic. In addition, they were asked to compare a number of passages in several different translations of the *Iliad*. Most important, the combination of close reading of the text with consideration of the varieties of its contexts and purposes set the stage for analysis of a variety of literary forms.

The second part of the course centered around the problem of tragedy. Shakespeare's *Troilus and Cressida*, which deals with the Trojan War in a dramatic context radically different from that of the *Iliad*, provided the transition. *The Trojan Women* was used to indicate the difference between dramatic and epic form, and to illustrate the ways in which literary treatments of the same historic events could vary for different purposes. The students were asked to write a short paper comparing the portrayal of the same character in two out of the three works. The study of tragedy itself concentrated on a close reading of the *Oedipus* cycle of Sophocles, the *Oresteia* of Aeschylus, and the *Bacchae* of Euripides. Especially lively discussions grew out of the comparison of tragic and epic heroes and the problem of heroism in general. By then, the pantheon was already rich with possibilities: kings, soldiers, the wily Odysseus, tormented Oedipus, the avenging son Orestes. Aristophanes' *The Frogs*, with its comic debate between Aeschylus and Euripides, provided a useful bridge between a consideration of the virtues of the heroes and an analysis of the virtues of the plays. Aristotle's *Poetics* and Nietzsche's *Birth of Tragedy* were used to acquaint the students with a more systematic approach to literary studies. Instead of journals, discussions led to a longer paper attempting to define tragedy. Again, student response emerged on two levels: those with a developed capacity to handle individual texts concentrated more heavily on the general problems raised by Aristotle and Nietzsche, whereas others focused attention on grasping the structure of a particular work. Discussions similarly moved from particular to general and back, providing an opportunity for all to participate at some stage or another.

The final section of the course was devoted to reading selected dialogues of Plato. By beginning with those describing the trial and death of Socrates we were able to establish continuity with our earlier concern



for heroism and the meaning of tragedy. The Protagoras and Republic I, enabled us to consider further the values of Greek community life and the problem of education as posed in the Iliad and the Odyssey. Finally, the Ion, the Symposium, and the Phaedrus raised explicitly the questions concerning the nature of literature and the nature and function of a written text which underlay the organization of the course. The final paper was on any topic in Plato which the student wanted to pursue further; love, irony, and poetry proved to be the most popular topics. Here, too, the approach to the dialogues was such that students could work on the level of both the particular work and the more general questions which it raised.

In addition to regular class discussions, the seminar was visited by several distinguished guests who contributed much to the success of the program. Mr. Richard Sewall taught Sophocles' Antigone; Mr. Paul Weiss conducted a lively discussion of the nature of a work of art; Mr. Norwood Russell Hanson discussed his illustrative drawings for a new edition of the Iliad; and Mr. Richard Bernstein taught Plato's Phaedrus.

In general, the response of the students to the program was excellent. The intensity of the course gave them an opportunity to concentrate their energies on a unified body of material and a set of problems. The organization of texts allowed the students to return again and again to specific developing problems which they could consider in both writing and conversation. Despite the quantity of material, they were always prepared, and their class discussion was both animated and intelligent. The diversity of background and interest, as well as of prior education, was such that everyone had something to contribute at almost every stage of the course. Our approach to such issues as heroism, tragedy, and social values enabled the students to draw on their own experience and attitudes in enlarging our consideration of the significance of the Greek outlook. The students worked hard and well, and it was evident that they gained increasing facility in reading literary materials, in writing both analytically and imaginatively, and in articulating and defending their ideas in discussion.

Perhaps the best impression of the Directed Studies Seminar may be conveyed by selections from the work of several of the students on a variety of the topics covered in the course. I have deliberately included examples at various levels of achievement; the sampling is as typical as may be.

On Art: "The observer of the work of art will look past it, past the initial physical appearance, and he will attempt to think of the form in terms of something abstract which is not perceived

by the senses. He will look at a painting and he will think of many other things. In the expression on a face he will comprehend thoughts and emotions. In the stillness of a form he will see unending motion." -- Robert Godfrey, Charleston, South Carolina.

The Trojan Women: "As the drama unfolds we see that more and more suffering is piled upon the Trojan women, until finally they are grasping for some small hope and then finally even that is taken away. This idea is symbolized with Astyanax, the son of Hektor. Hecuba and Andromache seem to hold the hope that some day the boy will grow up and possibly rebuild the once great city of Troy. This hope is dramatically taken away when the Greeks decide that the boy is to be thrown from the walls which once protected Troy, thus killing any hope of the rebuilding of Troy." -- Clyde Murphy, Opa Locka, Florida.

The Bacchae: "Although Pentheus is the tragic hero there is another tragedy in the story that I think is even greater. This is the tragedy of Agave, Pentheus' mother. You may say that nothing is worse than death. What could be worse? Agave's fate is much worse. She was not killed and therefore her misery lives on. She must live on knowing that she has been responsible for her son's death." -- Jimmy Smith, Darlington, South Carolina.

The Iliad: "Here exhibited is the grace of Priam and the tragedy of Helen. Priam shows his graciousness as he invites Helen to sit beside him and view the duel between Paris and Menelaos. Helen's tragedy is that she cannot decide to which side belongs her allegiance and she seems to be caught up in something beyond her control." -- Bill Coleman, Richmond, Virginia.

Plato's Ion: "Socrates attacks Ion's specialization in Homer. First, he asks Ion why he can interpret Hesiod when he agrees with Homer but not when there is disagreement. Then Socrates proves that if one can distinguish what is good, he must also be able to distinguish what is bad. Therefore, Ion must know all of poetry.

Socrates then shows that in all other arts, a critic can comment on works by all artists, not just one. Yet poor Ion can only talk of Homer. Therefore, Socrates deduces poetry must be different from the other arts. Socrates asserts that divine inspiration must come into play. Ion accepts this for two reasons. Ion would be proud to be considered the spokesman of the gods. Furthermore, this appears to Ion to be a respectable way out of his dilemma." -- Tom Kasulis, New Britain, Connecticut.

Oedipus Rex: "Second, we understand that to know too much leads to all kinds of disaster. We see that Oedipus saw too clearly his identity and punished himself for it. Yet all this self-knowledge helped Oedipus to become a god. In our modern society, we try to find out more about ourselves so that we can act better. So, to know oneself, I conclude, may hurt, but the result will be good whether we live in the Athenian, Theban, or in the modern society." -- Salvatore Conte, New York, New York.

Socratic Love: "But wait! Love is love of something. As love has been described as the search for beauty and Socrates has attained this beauty (or thinks he has), why should he use all his ironies and false seductions to lead others to seek the good. Here is the greatest of all Socrates' ironies. The absolute good does love. It is a love that is not described by Socrates, and is in fact denied by his definition of all as longing for the good. Nevertheless, Socrates loves. Through procreating wisdom in his listeners, he performs the same activities as the imperfect

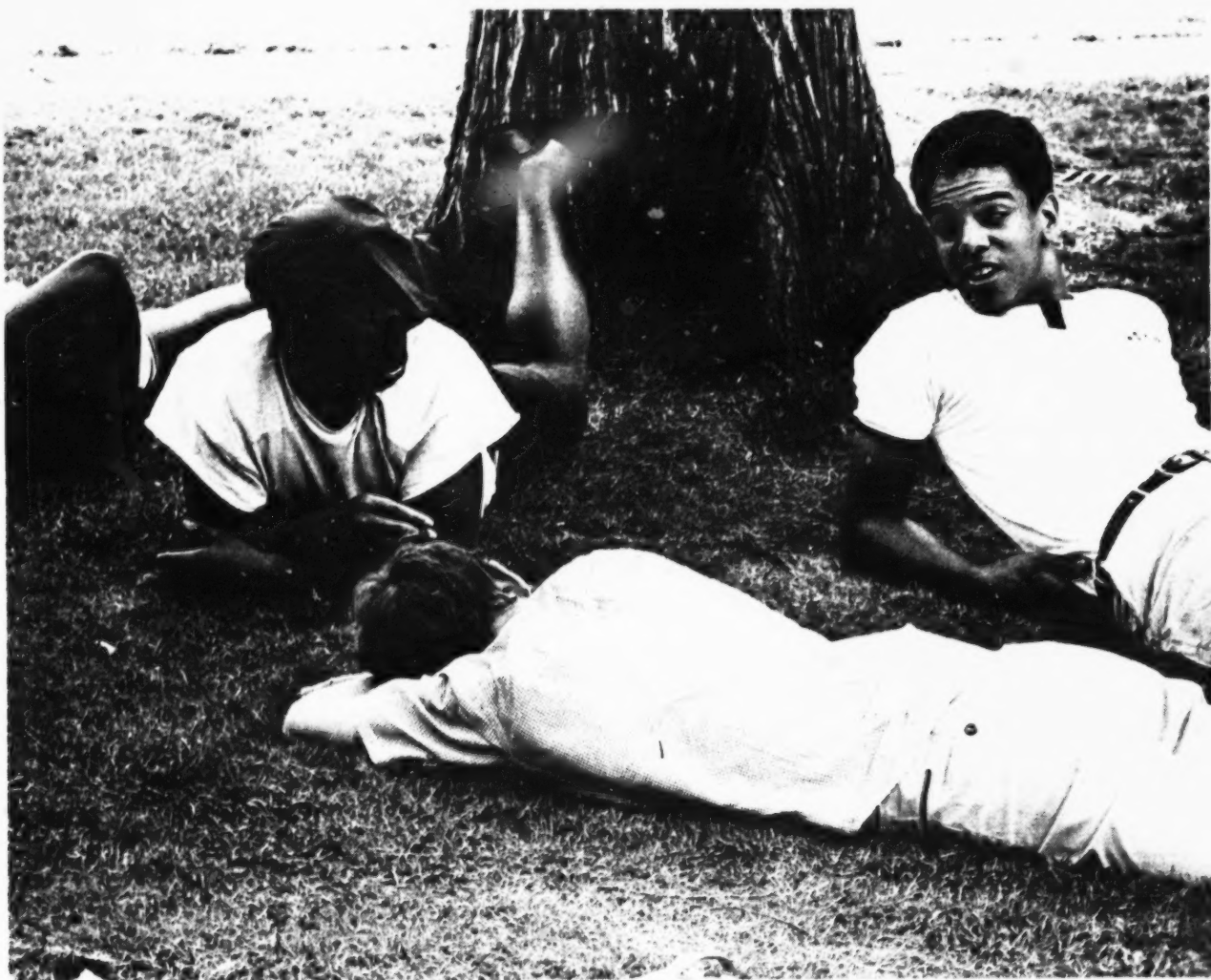


lover. This means that Socrates loves without need. As Socrates makes no attempt to explain this, neither will I, except to say that this is the love that men find hard to understand for it seems to come for no other reason than itself."  
-- Claud McCary, Huntsville, Alabama.<sup>26</sup>

Our pleasure at the extraordinary success of the Directed Studies Seminar has led to the inclusion in the 1966 program of five similar courses for fifty students returning for a second summer at the Yale Summer High School.

---

<sup>26</sup>I am greatly indebted to Morris Kaplan, who taught the Directed Studies Seminar, for gathering the material contained in this section.



## IX. DISCIPLINE

Discipline did not prove to be an especially thorny problem in the 1965 session. We decided at the outset that there would be very few published rules, and that the students should be made to understand that the burden was upon each of them to comport himself with a maximum degree of personal responsibility. The few published rules dealt quite specifically with minor matters which the faculty and staff agreed needed to be regulated for the good of the entire community -- smoking, leaving the campus, study hours, entertaining ladies on campus, and so on. Final authority was vested in the discipline committee under the chairmanship of Mr. Arthur France, Associate Director, although tutors and teachers had authority over minor infractions. Whenever the discipline committee met to discuss a student's violation of the rules, both the student and his tutor were present and were encouraged to participate in the committee's deliberations.

The committee found that two effective means of punishment were to campus a boy for the weekend or to assign him several hours of janitorial work around the campus. Usually a first offense brought only a strong verbal warning and not until a second offense was punishment assigned.

No student was sent home during the session.

There were only three occasions on which boys left the campus at night without permission, and in all three incidents the students returned before one A.M. Four or five students came before the committee several times for missing classes or frequent tardiness. It became apparent that three of these students needed psychiatric assistance, and consultations were accordingly arranged. In addition, Mr. Richard Sewall, Professor of English, Mr. Richard Bernstein, Associate Professor Of Philosophy, and Mr. George Cohan of the Yale Summer High School Mathematics Department all took on added responsibilities in counseling some of these five students.

We believe that the approach to the problem of discipline in the 1965 session was a sound one. We do plan, however, to set forth more explicitly in advance the consequences of infractions of the few prescribed rules.

In general the atmosphere of freedom which existed at the Yale Summer High School proved especially beneficial to the large proportion of the students, many of whom came from schools and homes which were inordinately restrictive. A number of students remarked that, for the first time in their lives, they had come to understand what personal, individual responsibility meant.



## X. THE SCHEDULE

The daily schedule, Monday through Friday, was as follows:

|                |                                                                                                                                                                                                                                                                                                    |
|----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 7:00- 8:00     | <u>Morning</u><br>Breakfast                                                                                                                                                                                                                                                                        |
| 8:00 - 9:10    | First Class Period--English or Mathematics                                                                                                                                                                                                                                                         |
| 9:20 - 10:30   | Second Class Period--English or Mathematics                                                                                                                                                                                                                                                        |
| 10:40 - 11:50  | WFF'N Proof or Time, Space and Matter                                                                                                                                                                                                                                                              |
| 12:00 - 1:00   | Lunch                                                                                                                                                                                                                                                                                              |
| 1:00 - 3:00    | <u>Afternoon</u><br>Speech (one hour each student per week)<br>Study Skills (one hour twice a week per student)<br>Tutors' Seminars (one to one and a half hours, two to three times a week per student)<br>Individual Student-Teacher Conferences or Individual Study (four or five hours a week) |
| 3:00 - 5:00    | Athletics                                                                                                                                                                                                                                                                                          |
| 5:30 - 6:30    | Dinner                                                                                                                                                                                                                                                                                             |
| 6:30 - 7:00    | <u>Evening</u><br>Free, except on Visiting Speaker Nights, which usually lasted until 8:00 P.M.                                                                                                                                                                                                    |
| 7:00 - 9:30    | Compulsory Study Hall, in the student rooms                                                                                                                                                                                                                                                        |
| 9:30 - 10:00   | Free                                                                                                                                                                                                                                                                                               |
| 10:00 - 12:00  | Students required to be in rooms, study not compulsory, informal conversation encouraged                                                                                                                                                                                                           |
| 12:00 midnight | Lights Out                                                                                                                                                                                                                                                                                         |

The morning schedule was the same on Saturdays as on weekdays although on those Saturday mornings following attendance at the theatre,

the schedule was abbreviated so that there were three class periods, each fifty minutes in length, with the first commencing at 9:00 A.M.

Saturday afternoon was free for the students to do as they wished. Options included shopping in New Haven, attending movies, visiting libraries and museums or just loafing. Special interest tours of Yale laboratories and other facilities were arranged and were usually oversubscribed. Saturday night was reserved for social events and special cultural events, but there was always a movie at the School for those who did not wish to participate in other activities.

On Sunday mornings, the students were encouraged to attend religious services of their choice. However, at 11:00 A.M., there was a non-denominational service in Marquand Chapel of the Yale Divinity School under the auspices of the Yale Summer High School. The religious services were planned as a means of introducing students to a variety of religious viewpoints, and it was contemplated from the beginning that attendance would be compulsory. As was expected, there was considerable concern among the members of the staff about the wisdom of compulsory religious services, even if they were to be considered school events, and after the first Sunday the religious services were made voluntary. Predictably, attendance at these services plummeted dramatically, despite the presence of important visiting ministers.

We do not contemplate Sunday morning services as a regular part of the 1966 program. Instead, arrangements will be made for students to attend churches of their choice, and the staff will encourage them to participate in religious services of some kind.

Sunday afternoons were free, although many students chose to visit with New Haven families for Sunday dinner and afternoon activities. Frequently, families arranged special picnics, trips to the beach, outings to historical sites, or visits to various cultural events in the vicinity. The students were required to return to the campus by 6:00 P.M.<sup>27</sup>

---

<sup>27</sup>We are particularly indebted to Mrs. Charles Endel of Hamden, Connecticut, for the large amount of time she contributed in arranging the Sunday afternoon home visits. Mrs. Endel contributed also to the arrangements for the major social event of the summer -- a dance given by the Yale Summer High School for all of its students.

The Sunday evening schedule was the same as the weekday evening schedule, with the exception that the early evenings of most Sundays saw meetings of the entire student body for the purpose of announcements and questions from the students.



## XI. ORIENTATION

No specific orientation period was planned for the students. It was hoped that the first week of classes would afford enough free time for the students to be shown informally around the Yale campus. We thought it best to have the students commence their studies immediately, rather than provide enough idle time for homesickness to develop. The first day the students were on campus was entirely devoted to the necessary testing, a process which extended over into those few periods of free time which had been reserved during the first week of classes. Consequently, the students effectively lost their orientation period. This did not prove to be a problem of major significance, but the staff felt that a genuine orientation period, complete with tours of the facilities and discussion of the goals of the program, would be of value in getting the students off to a good start. Consequently such a period will be included in the 1966 session.

There was a two-day period of staff orientation which began with a staff dinner on Thursday night, June 24th. The staff orientation program, which was in session all day Friday, June 25th, and Saturday morning, June 26th, dealt with the problems which we expected to encounter during the summer. The consultants for orientation were: Mr. David Gottlieb, Director of Training of the Job Corps, Office of Economic Opportunity; Mr. Thomas S. Pettigrew, Associate Professor of Social Relations at Harvard, and author of A Profile of the Negro American; and Mr. Clifford Campbell, consultant for the Ford Foundation.

From his own experiences with the Job Corps, Mr. Gottlieb drew analogies to the situations which the Yale Summer High School would confront in the course of its program. Using these experiences as a base, he compelled both teachers and tutors to redefine their overall goals, as well as to look at potential problem areas in the day-to-day conduct of the school. He was especially concerned with the problem of "re-entry" -- the return of the student to his home environment.

Mr. Pettigrew discussed the problems posed by the interaction of students from different racial and geographical backgrounds in the context of the Yale Summer High School. His excellent analysis and optimistic predictions were proved almost precisely accurate by the session.

Mr. Campbell discussed the place of the Yale Summer High School within the national movement of compensatory education programs; his insights were of great value to the staff members in preparing for the summer.

Also participating in the orientation sessions were Mr. William Kessen

Professor of Psychology at Yale and Chairman of the Research Advisory Committee of the Yale Summer High School; Mr. Edward Klein, Director of Research for the Yale Summer High School; and Mr. Laurence Gould, Assistant Director of Research for the Yale Summer High School.

The orientation session for the 1965 session was of benefit to the entire staff, and will be expanded in the 1966 session to allow more time for intra-staff discussion and planning.

At the conclusion of the summer, there was a staff review of the 1965 session of the Yale Summer High School. Frank appraisal was sought from all those who had participated in various capacities at the Yale Summer High School. We had previously obtained from each member of the staff his written evaluations of the entire program, and these comments were used as the working paper for the session. The discussions at the review session were most helpful in planning for the 1966 session.

## XII. THE ATHLETIC PROGRAM

The athletic program was designed both to enable the students to improve the general state of their physical condition and also to expose them to a wide variety of competitive athletic activities. We believed that, in addition to a more spirited performance in the classroom, the student would gain an important kind of self-confidence from new skills mastered in the athletic program.

During the first week, all students were required to take a one hundred-yard swimming test, as well as the physical fitness inventory administered to all Yale freshmen. About seventy students failed to swim the required distance. Those who did not pass the swimming test were required to take swimming instruction every week day for the next two weeks, after which time, if they still had not passed the swimming test, they continued such instruction two afternoons a week, while also participating in a sport of their choice two other afternoons of the week.

For all those students who passed the swimming test, the first week provided an introduction to the various sports offered by the school: basketball, softball, volleyball, touch football, tennis, and soccer. The tutors in charge of each sport utilized these periods to acquaint students with the methods and rules of the sport and to give them some experience with it. After the first week, each student engaged in the sport of his choice for two afternoons a week, had a short program of body building followed by free exercise at Payne Whitney Gymnasium for another two afternoons a week, and participated with his decade in team competition on Fridays. The conduct of sports varied, largely according to tutor interest and abilities.

Some thirty-five to forty boys signed up for basketball, about thirty for softball, about twenty each for tennis and soccer, and the remainder for either volleyball or touch football.

There was considerable discussion among the staff about the decision to use only one afternoon a week for competition among the decades. It was the feeling of some members that by forging the tutor groups into athletic teams for the purpose of competition a more closely knit unit would evolve, and the ensuing spirit would carry over into all phases of the program. Most of the staff felt, however, that it would be more important to keep such competition to a minimum, and thereby allow the students the opportunity to engage in a variety of sports of their own choosing. Based on our experience in the 1965 program, we plan a more flexible athletic program



for the 1966 session which will permit the number of days reserved for competition among the decades to increase gradually during the summer.<sup>28</sup>

---

<sup>28</sup>We are indebted to Mr. DeLaney Kiphuth, Director of Athletics at Yale, for his assistance in providing all of the necessary facilities and equipment for the athletic program, and in recruiting the instructional staff necessary to make it operable and successful. We were especially fortunate in having the services of Mr. Robert Kiphuth, one of the world's great swimming coaches, who has now retired from his position at Yale. He was ably assisted by Mr. Harry Burke, formerly the Freshman Swimming Coach at Yale.

As will be evident from the description above, the scheduling of the athletic program was rather complicated, but it was ably and accurately managed by Mr. Erik Esselstyn.

### XIII. THE HEALTH PROGRAM

The Department of University Health was available to the students and tutors for diagnosis and treatment of all medical problems. It was a rare day which did not find several students going to have ankles checked, sore throats examined, and cuts and bruises treated. The University Infirmary, conveniently located across Prospect Street from the Yale Summer High School, frequently had one or two students in residence for short periods while receiving treatment for colds and viruses of various kinds.

The student health psychiatric staff was consulted on several occasions, but only one student presented serious emotional problems. It was largely due to the patience and attentiveness of the university health staff that the student was enabled to complete the session.<sup>29</sup>

---

<sup>29</sup>We are immensely grateful to Dr. John Hathaway, Director of University Health, Dr. Fazzone, Dr. Robert Arnstein, Director of the Student Mental Health Service, and the entire staff. Dr. Hathaway personally attended to the needs of the students at all hours including those during the holiday weekend of July 4 -- just another weekend with the usual colds and sprained ankles for the Yale Summer High School students.

#### XIV. ACTIVITIES

Activities at the Yale Summer High School were thought of as an opportunity to supplement the classroom work and to provide the means for developing the special interests and talents of students and staff. Regularly scheduled, continuing activities included the drama society, the debating society, the Yale Summer High School News, and the choir.

The drama society met every Monday after lunch to work on the essentials of dramatic performance and to prepare for "play night", an event of the final week, for which students and faculty both presented excerpts from three plays and premiered one original production. Under the direction of Miss Carroll Dawes, the Monday meetings were devoted to readings and the casting of parts. Rehearsals took place after study hall on certain evenings. On "play night", the students presented scenes from Raisin in the Sun and All My Sons; the faculty and tutors responded with scenes from The Catbird Seat and a three act original play, From Connecticut College with Love -- An Original James Bomb Thriller, written by a tutor.

The debate society was formed because of the obvious interest of the students, manifested during the opening week of the School, in arguing important questions. The hope was that the debate society would enable the students to channel this interest into the structured procedures of formal debate. Frank White discussed with the debaters the major styles and techniques of debate and prepared instructional papers as supplementary material for future reference. A parliamentary debate, with enthusiastic audience participation dealt with the topic: "Resolved: that violence in the form of self-defense should be adopted by the civil rights movement." In addition, an exhibition debate on "free will" was also presented by the society.

The Yale Summer High School News provided an outlet for students with the requisite ability and desire to write descriptively or critically. The newspaper, by design, contained more poems, short-short stories, and feature articles on the School than it did news reports. It helped to create a sense of community within the entire school. All of the work was done by the students, with editorial assistance from Mr. Leonard Chazen and Mr. James Adams, volunteer members of the staff. Plans have been made to expand the scope of the paper and to publish it on a weekly basis in 1966.

The choir attracted a varying number of students with an interest in singing and practiced twice weekly in preparation for the Sunday morning services. Though attendance at the services waned over the course of the summer, participation in the choir did not.



Impromptu jam sessions of all kinds took place frequently during the early weeks of the summer. Clark Brown, Assistant to the Director, decided to focus this energy, and scheduled for the last week of the session a Hootenanny, at which a wide variety of entertainment was presented, including a folk singing group and several guitar players. The rockingly successful program lasted for more than two hours.

The speakers program presented a variety of speakers, men eminent and active in a number of challenging fields. It was hoped that the examples of these men, as well as the information they imparted and the questions they raised, could stimulate, engage, and broaden the interests of the students. Some of the speakers appeared at the Sunday morning services while others spoke and answered questions in the common room during the hour-long period after dinner during the week. Most visiting speakers gave a short talk, followed by a long question-and-answer period. Some of the visitors presided over a table at dinner and followed with informal conversation with interested students in the common room.

Speaking were the following: June 27th -- The Reverend William Slane Coffin, Jr., Chaplain, Yale University, who discussed, at the opening session of the school, "A Sense of Community". June 29th -- Mr. Sidney Mintz, Professor of Anthropology at Yale, who discussed "Men and Monkeys". July 8th -- Mr. Carey McWilliams, Assistant Professor of Political Science at Oberlin, who discussed "A Time and a Place", dealing with the relativity of moral standards. July 13th -- Mr. John Ehle, author and then a staff member of the Ford Foundation. July 14th -- Mr. Richard Bernstein, Associate Professor of Philosophy at Yale, presently Chairman of the Department of Philosophy at Haverford, who conducted a dialectical discussion of the philosophical method. July 15th -- Mr. Paul Weiss, Sterling Professor of Philosophy at Yale, who discussed "The God We Seek", the subject matter of his recent book by the same name. July 18th -- Reverend James Breeden, Assistant Director of the Commission of Religion and Race of the National Council of Churches, a man active in the civil rights movement in Mississippi, Alabama, and in Boston. July 21st -- Father Norman J. O'Conner, "the jazz priest", director of radio and television productions for the Paulist Fathers of New York City, who discussed modern trends in Roman Catholicism. July 22nd -- Miss Ruby Dee, theatre and motion picture star, during the summer appearing at the Stratford Shakespeare Festival, who discussed "The Arts and a Changing World". July 25th -- Mr. William Muehl, Professor of Practical Theology at the Yale Divinity School and a member of the New Haven Board of Aldermen. July 25th -- Mr. Robert Dahl, Sterling Professor of Political Science at Yale, who discussed "The United States and Viet Nam", an analysis of American options and opportunities. July 28th -- Dr. Bernard W. Robinson, Chief of Staff at the U.S. Veteran's Hospital in West Haven, who discussed "Religion and Medicine". July 29th -- Mr. Charles E. McCarthy,

Director of the Cooperative Program for Educational Opportunity, who discussed "College Admissions". August 1st -- Mr. Norman Thomas, six-time presidential candidate of the Socialist Party, who discussed "The U.S. in International Affairs". August 3rd -- Mr. Allard K. Lowenstein, New York attorney, who discussed civil rights and international affairs. August 4th -- Reverend Gladstone Ntlabati, Anglican minister from the Union of South Africa, and currently a student at the Harvard Divinity School, who discussed South Africa. August 5th -- Mr. Louis Harris, public opinion analyst, who discussed "Kennedy off the Record". August 8th -- Rabbi Stanley Kessler, Temple Beth El, West Hartford. August 8th -- Mr. John Hersey, distinguished author, Master of Pierson College at Yale.

Another, and very popular, aspect of the Yale Summer High School was that comprising the more conventional social occasions. In the course of the summer, three mixers were held for the Yale Summer High School students at the Connecticut College Summer Program in the Humanities, a program similar to the Yale Summer High School involving forty girls. Because of the limited number of girls in the Connecticut College program, the Yale Summer High School students were asked to choose either to attend the first mixer or, as an alternative, to attend a concert given in New Haven by Peter, Paul and Mary. To everyone's surprise, no more than the number invited to New London signed up for the mixer. Those students who did not attend the first mixer were given priority in attending the two succeeding ones.

On August 7, the Yale Summer High School gave a dance to which were invited girls from Connecticut College as well as girls from New Haven. The Ridge Top Country Club turned over its entire facilities to the School for the evening. Walter Wagoner, who was responsible for social activities and Sunday family visits, gave many hours of his time to the planning of these recreational parts of the program.<sup>30</sup>

On five of the seven Friday nights during the session, the School arranged for all of its students to attend productions either at the Long Wharf Theatre, New Haven's new repertory company,<sup>31</sup> or at the American

---

<sup>30</sup>The Yale Summer High School is indebted to Mr. R. Inslee Clark, Jr., Dean of Admissions and Students Appointments at Yale, who permitted Mr. Wagoner to spend a good part of his time working on this program.

<sup>31</sup>The trips to the Long Wharf Theatre were particularly exciting for the students. The Long Wharf was enjoying its premier season, and extended itself to make theatre comprehensible and vital to the Yale Summer High School student body.



Shakespeare Festival Theatre at Stratford.<sup>32</sup> For most of the students, this was their first opportunity to witness live theatre, and many were deeply moved and interested by the plays they saw.

The schedule for plays was as follows: July 9 -- The Crucible, Long Wharf; July 16th -- The Taming of the Shrew, Stratford; July 23rd -- The Hostage, Long Wharf; August 6th -- Little Mary Sunshine, Long Wharf.

In addition, the students participating in the Directed Studies Seminar attended an excellent production of King Lear at the Stratford Festival.

Every Saturday night, a film was shown on the School campus. When there were other events scheduled, those students who did not wish to participate attended the movie instead. The films were chosen so as to complement the English curriculum, and they were frequently discussed in class the following week. The schedule of films was as follows: June 29th -- "Wee Geordie"; July 10th -- "On the Waterfront"; July 17th -- "The Promoter"; July 23rd -- "Intruder in the Dust"; July 24th -- "Shane"; July 31st -- "Raisin in the Sun"; August 8th -- "Billy Budd".

Students at the Yale Summer High School also journeyed to Stratford for a concert by Odetta, the well-known folk singer. In addition, all students who did not attend the first mixer at Connecticut College were provided with tickets for the Peter, Paul and Mary Concert in New Haven. The student response to both of these concerts was one of excitement and enthusiasm.

On Tuesday evenings, a number of tickets were made available for the students to attend chamber music concerts in the Yale Law School courtyard. Most of the students who attended were enrolled in the seminar on "Introduction to Music", taught by Trevor Cushman.

---

<sup>32</sup>The staff of the American Shakespeare Festival Theatre cooperated generously with the Yale Summer High School in many ways. We are especially indebted to them for arranging for Miss Dee's appearance at the Yale Summer High School and for making it possible for our students to attend a concert of folk music by Odetta.



## XV. FACILITIES

The Yale Divinity School campus was an ideal plant for the Yale Summer High School. The quadrangle includes dormitories for the students and their tutors, a dining hall, a library, an auditorium, common rooms, classrooms, seminar rooms, and lecture halls. The students had access to adjacent basketball and tennis courts and playing fields. Dean Robert Johnson of the Yale Divinity School, Mr. Ray Wood, Executive Secretary of the Divinity School, and Mr. John J. McGovern, Custodian of the Divinity School, extended the fullest possible cooperation to the staff and students of the School. They continually went out of their way to be of assistance. The faculty and staff of the Yale Divinity School, who carried on their own activities during the summer, were always ready to help in special ways.

I would like also to express at this point my appreciation to all of the members of the Yale faculty and administration who assisted the Yale Summer High School in many different ways over the course of the summer. There was virtually no corner of the Yale campus and no part of the Yale administration which was not at some point involved in the Yale Summer High School activities. Mr. Thomas Bergin, Mr. Beekman Cannon, Mr. Elias Clark, Mr. George Lord, Mr. Davie Napier, Mr. Richard Sewall, and Mr. Charles Walker, masters of residential colleges at Yale, all made their guest suites available as they were needed.

Mrs. Anna Bowditch, Head Mistress of the Day Prospect Hill School, not only made her playing fields available on a daily basis to the students, but also generously allowed her own home to be used for receptions on several occasions.

Mr. Arthur Brandenburg, Methodist Chaplain at Yale, and Mrs. Brandenburg also offered the use of their residence to entertain visiting speakers and guests.

Mr. Herbert Kutz, Director of Dining Halls at Yale, Mr. William McDermott, Assistant Director of the University Dining Halls, and Mr. Henry Dean, Supervisor of Vending, were called upon frequently, and always had problems solved almost before they had arisen. Mrs. William DeSantis and Mrs. Bernarda DeLeeuw, Managers of the School dining hall, saw to it that both the food and service were excellent.

Students had access to Sterling Memorial Library, and Mr. R. W. Watkins, Associate Librarian, made them welcome at all times.

Mr. Charles M. O'Hearn, Assistant to the President of the University,

provided office space, a scarce commodity at Yale, and his entire staff, particularly Mr. Gerard Swords, who advised in raising the money necessary to carry on the Yale Summer High School, and Mrs. Alice Grannis, Office Manager of the Development Office, gave frequent advice and assistance.

Mr. Edward C. Roberts, Comptroller of the University, and his staff, particularly Mr. Clarence F. Stout, Jr., Mr. James P. Lewis, and Mr. Donald V. Greene, Associate Comptroller, never failed to expedite fiscal transactions connected with our program. Their assistance was of incalculable value in administering the program.

Mr. William Randolph, Director of Purchasing and his staff, particularly Mr. Arthur A. McLaughlin, Mr. Edward F. Slattery, Mr. Guy DeBrun, and Mr. Daniel B. Lorenz, cooperated fully, patiently, and with great speed in seeing that our logistical needs were met.

Mr. John W. Powell, Director of Security at Yale, extended the fullest assistance whenever it was needed.

Mr. John S. Ellsworth, Jr., Chairman of the Audio Visual Center at Yale, generously provided all of the equipment needed from time to time by the School.

Miss Marjorie Jones, Director of the Clerical Bureau at Yale, saw to it that all of our duplicating needs were promptly satisfied. Mr. James W. Boyden and Mr. Robert S. Jennings, both of the Yale University Press, filled our printing requirements on the shortest notice and with the greatest care and quality.

Mr. George H. Griswold, Personnel Director at Yale, and his staff, particularly Mr. James H. Shattuck and Mrs. Anne R. Nagel, saw to it that our personnel needs of the Yale Summer High School were promptly and properly met.

Mr. Stephen A. Kezerian, Director of the University News Bureau, and his staff, particularly the late Mr. J. Richard Banks, Mr. Charles T. Alburtus, and Mr. Harold W. Helfrich, Jr., lavished their personal attention on the work of the School, and made generously available their expert services with respect to our public information needs.

Mr. Charles L. Willoughby, President and General Manager of the Yale Co-op, was always ready to expedite orders for instructional materials and office supplies.

Mr. Philip F. Sauer, Director of Housekeeping at Yale, and his staff, particularly the telephone operators, were called upon literally day and night and never failed to fulfill all requirements of the staff and students of the School.

I have in this fashion risked courting the boredom of those outside the Yale community who read this report. It is intended, however, both to convey some notion of the inextricable involvement of every department of the University in the support of the Yale Summer High School and also to manifest the individual commitment of Yale administrators at all levels to the goals of this program. Without the quality of unstinting support we enjoyed, a program of this kind would inevitably have to endure frequent delays and difficult problems, which, because of its brevity, it can ill afford.





## XVI. RESEARCH AND EVALUATION<sup>33</sup>

Late in the planning for the 1965 session of the Yale Summer High School, it became clear that, without some systematic effort, we could neither learn very much of an objective nature about the students whom we taught nor about the changes which we hoped to effect in their attitudes and aspirations. Furthermore, since funds were expected to become increasingly available for programs of compensatory education, it seemed important to develop some means of distinguishing fruitful approaches from those less successful. Consequently, we decided to find out as much as possible about the students enrolled in the 1965 session, and to attempt to discover how the program as a whole affected the students with respect to changes in intellectual achievement, attitudes toward school, family, friends and society, and both immediate and long range goals.

As the students had already been selected by the time the research staff was appointed, the research design was necessarily imperfect. Our inability to obtain adequate control groups was the most serious consequence of our late start. We decided nonetheless to do the most objective and verifiable job possible under the circumstances and use the results, both substantive and methodological, as a pilot effort in preparation of a sound research and evaluation program to be instituted with respect to the three succeeding sessions of the Yale Summer High School.

The Carnegie Corporation of New York generously provided the funds which made possible both the analysis of the data on the 1965 session, and the refinement of the instruments, techniques and design to be employed in the research and evaluation efforts on the forthcoming sessions.

In 1965, we administered to all our students during the first and last weeks of the program an extensive battery of measures of intellect, personality and attitudes. In addition, we obtained complete demographic data as well as an index of friendship patterns. The five scores which served as our criteria of intellectual achievement were derived from the Preliminary Scholastic Aptitude Test (PSAT) of the Educational Testing Service. Separate analyses of each of these intellectual criteria suggest that the group as a whole improved significantly on every one of them. Because a control group was not available, however, one must interpret these results with caution as it is clearly possible that the findings obtained were caused by practice and familiarity rather than heightened commitments to learning.

---

<sup>33</sup>I am indebted to Dr. Klein and Dr. Gould for their assistance in preparing this portion of the report. For their complete report, see Appendix.



Extensive analysis of the PSAT scores obtained at the beginning of the session indicates that there were significant initial differences between scores registered by white students in comparison with those of non-white students and scores registered by urban students in comparison with those of rural students. These differences are largely a reflection of unequal preparation in the respective high schools. It is of interest that all groups improved significantly over the course of the program. One may therefore conclude that, although there were significant differences among the students, the program was widely successful in reaching all of the subgroups to a measurable extent.

A number of detailed analyses were made in order to answer questions relating to the relative effectiveness of various teaching techniques and curricular materials employed in the Yale Summer High School. Statistical analyses suggest that there was no evidence that "WFF'N Proof" or the instructional techniques selectively employed in the mathematics program affected student intellectual performance differentially. These results were obtained regardless of the race or urban-rural background of the student. As the structure of the English program was not designed to enable an evaluation to be made of the different teaching methods in that curriculum, no judgments are possible with respect to it.

There are characteristics of a teaching situation which seem to affect the intellectual growth of students, but these were not evaluated comparatively during the course of the past summer. There are, for example, suggestions in the data that the sex and race of the teacher may play an important role in student performance, but this hypothesis remains to be tested in future Yale Summer High School programs.

During the second and seventh weeks of the program, every student was asked to name those three boys he liked best. His response was then scored to indicate the number of times he chose boys of his own race. The data indicates that whites chose more often within their own race, both before and after, whereas non-whites selected other non-whites more before but distributed the selection equally within both groups afterwards. In general both groups selected whites more often in the seventh week than they did initially. Perhaps the boys' social situation, with the intensive emphasis on academics, subtly leads to a greater selection of whites than others, primarily on intellectual and social grounds. These data are being subjected to additional analysis in order to evaluate more precisely the factors behind this finding.

As mentioned above, an extensive personality and attitudinal battery was administered to all students during the first week of the program. An analysis of the data by racial background shows the following statistically significant differences:



Non-whites seem to have a greater "need for approval", deny pathology more often on the Minnesota Multiphasic Personality Inventory, have a greater dislike of the poor, are more authoritarian, have a higher self-concept, and most impressively, score lower on eight of twelve possible difference in mood factors (i.e., aggression, hostility, ego, etc.).

This syndrome of personality traits suggests that the non-white students recommended to the Yale Summer High School, as compared with a similar group of white students, evidence much greater denial and rigidity. One explanation of these findings worth exploring is that the non-white students have turned themselves into a caricature of their idealized images of white middle class society in order to enhance their chances for acceptance by that society. Understandably, white students, however, do not seem to have to pay such a price for their own upward striving.

Though these interpretations are speculative in nature, they address themselves to an aspect of racial personality differences which is as yet undiscussed in the scientific or philosophical journals. The observed personality differences appear to be a consequence of racial prejudice, incomplete adolescent adjustment, and an attempt to accommodate one's own high level of aspiration to many real social and familial pressures.

There is one important reason for exercising great care in undertaking research on a program of this kind. The students are present for a very short period of time, and it is unfair to do less than everything possible to stimulate every one of them to greater achievement. Consequently, we decided to do whatever we judged necessary to benefit the students in the 1965 session and then built around that program -- and limited strictly by it -- whatever research and evaluation effort might be employed consonant with it. This remains the philosophy of the Yale Summer High School, although more careful and earlier planning will undoubtedly make possible the generation of knowledge about our effects, both differential and total, without compromising in any way the interests of those students in attendance.

## XVII. PROGRAM OF FOLLOW-UP

The Yale Summer High School was not intended as a brief, pleasant interlude for one hundred otherwise disadvantaged young men. It was not conceived as a sweetener -- one summer of happiness -- in otherwise bitter lives. Rather, it was intended to make a significant intervention in the lives of its students -- to embolden them to break away from a passive acceptance of their lot and to undertake the active organization and direction of their lives which characterize the autonomous human being.

We realized that after seven short weeks -- though uniquely filled with excitement and growth -- the Yale Summer High School students would return to the same environments they had left. We feared that they might well fall back, after a short period of enthusiasm, into their previous patterns of underachievement. For these were the same home and school environments which had in the first instance eroded and blunted the boys' initiative and their exploratory impulses. Moreover, since the boys came from all over the country, once they returned home they would not be able to reinforce one another's new commitments. The Yale Summer High School student would be on his own.

Accordingly, it seemed to us essential to the achievement of the desired long-run effect of the Yale Summer High School that we establish a follow-up program which would encourage its students' new initiatives.

A full time Associate Director was appointed and charged with establishing and administering the follow-up program, as well as assisting in the planning of the next session. At the same time, in order to maintain more intimate and continuing contact with the students, a system of Community Counselors was devised. These Community Counselors, who live in the same vicinity as the students, are usually Yale alumni. Ideally, they can serve as personal models and intellectual companions for the boys, and can introduce them to the manifold cultural resources of their communities.

Far-flung and largely impersonal lines of communication, the voluntary nature of the responsibility taken on by the Community Counselors, the fact that those men most willing to help the Yale Summer High School were often already very busy, and the haste with which the system had to be set up,<sup>34</sup> all militated against efficient organization

---

<sup>34</sup>The rush in the organization and staffing the Community Counselor system was occasioned by our desire to have the Counselors' visits with



and uniform commitment by the Community Counselors. These factors were not by any means wholly negative, however, since Yale's original purpose was not to set up an efficient organization but to make possible a variety of positive relationships. In fact, in many instances Community Counselors have made outstanding contributions to our students and their schools. I list a number of examples to give some idea of the range of these contributions. In Oak Ridge, Tennessee, the Community Counselor and student meet on a weekly basis. The Counselor has influenced the student's attitude toward school, his career plans, and the use of his free time. In New Orleans, the Community Counselor has become active in promoting school integration, has initiated contact between the Yale Summer High School and an additional Negro school and has helped to bring to fruition at Tulane a summer program similar to the Yale Summer High School. In New York, two Community Counselors so encouraged one student's interest in South Africa that he interviewed a number of officials and wrote a sixty-page assignment. In Cleveland a Community Counselor helped a student find a computer -- and free computer time -- in order to continue his summer's work in programing. In Washington, D.C., a Counselor and his student meet periodically to read and discuss historical novels, a common interest of both of them. This kind of diversity of involvement could clearly not have been predicted or demanded, but could only occur as the result of the natural evolution of relationships.

The Associate Director devoted a major part of his time during the autumn and early winter to the follow-up program, writing to the students' parents, guidance counselors, and Community Counselors detailed and hopefully provocative letters evaluating each student's summer experience at Yale. He also traveled extensively to see both 1964 and 1965 students at their schools. These visits gave him the opportunity to try to understand the kinds of problems the students face in their home and school environments. Often the students were in high spirits, having begun to experience success in their courses and in extra-curricular activities. In those cases, the conversation usually moved to subjects of intellectual

---

the students take place before the commencement of the 1965 session. If the counselors were to be able to serve as a bridge between the students' home and school environments and the experience of the students at the Yale Summer High School, the potential strength of the relationship between student and counselor could be enhanced by having the Counselors' initial meeting with students take place before the latter departed for New Haven. Consequently, the student's return to his home would be made easier as a result of his prior acquaintance with the Counselor assigned to him.



or topical interest -- Freud's Interpretation of Dreams, William Faulkner, or the war in Vietnam. Discussions ranged far beyond the usual cliches and into the underlying assumptions about the ways in which men can enrich each other's lives. These conversations seemed especially valuable to the Associate Director because they constituted learning itself rather than mere talk about it.

When visiting students who had not improved at school and who seemed more guilty than excited ("I guess I sure messed up the idea of the Yale Summer High School, didn't I?"), the Associate Director avoided talking about education. Most of them had been told many times the reasons for doing their homework. Evidently none of these reasons had been adequate because they had not in fact induced the student to work. Conversations with these students became searches for an inner reason to learn. The students generally attempted to introduce other external reasons, while the Associate Director tried to elucidate his conviction that coming to an inner wish to learn -- coming to an aim -- was a slow process arising from introspective questioning, which in turn wells up from a feeling of incompleteness -- a kind of dissatisfaction with one's present state. In these conversations the Associate Director attempted to encourage the student's questions and to demonstrate that he and his future were worthy of the demands that he must make of himself.

Another means of maintaining communication with the students and of keeping alive the spirit of inquiry which the Yale Summer High School had been striving to engender was the bi-monthly Alumni News. The students were encouraged to submit poems, essays, and short stories as well as news about themselves. These were collected to form the major part of the October and December issues.<sup>35</sup> The February issue dealt primarily with summer school possibilities for the summer of 1966.

The Yale Summer High School has made arrangements with various summer programs to give special consideration to our former students. Such consideration results from general agreement that additional summer experiences have a more than additive effect on the students' aspirations and self-esteem. Also, while it is not the intention of the Yale Summer High School to place all of its student body in a new school environment after the summer at Yale, we have made arrangements with a number of independent schools to save places and funds for a few especially needy and unusually deserving students.

---

<sup>35</sup>See appendix for a copy of the Yale Summer High School Alumni News.

A further follow-up activity has been the writing of a large number of college recommendations for the 1964 students and a smaller number of recommendations to independent schools on behalf of students who have returned to public schools but feel they would profit significantly from a final year (two years if they are required to repeat a year) in a more intensive, residential school environment.

Finally, one of the most difficult challenges presented by the follow-up program has been to learn the art of writing a letter capable of drawing a response from the student -- not necessarily a written response but any reaction in the emotions and motivation of the student. We have tried to write letters through which the student can enter into dialogue with us -- letters which both manifest and make attractive to the student the value of learning.<sup>36</sup>

---

<sup>36</sup>I am indebted to Mr. William Torbert for his assistance in compiling this section of the report.

## XVIII. PERSONAL IMPRESSIONS AND PRELIMINARY CONCLUSIONS

Having reviewed at some length the problems which our efforts were designed to ameliorate, as well as the means through which our energies toward that end were channelled, I would like to take a few lines more to distill some thoughts about the answers, still provisional, which have occurred to me as a result of my involvement with this extraordinarily engaging work.

The over-riding problem is people, people with sensitivity and empathy, people with guts enough to care, soft enough to show it, and hard enough to keep high the standard by which each learner must measure his goals. The closer our society can approach matching one such person to each student in a school, the nearer will be the realization of all our potential.

I am describing not the millennium but the now. We have the resources if we will but mobilize them to the scale demanded by the problem. Our society abounds with nonprofessionals who care, and who might be used all across the land just as effectively as the college student tutors, the faculty and professional wives, the students only a year or two older than the learners, and even the peers of the learners themselves whom we focused on the tenth graders attending the Yale Summer High School.

Why not open the doors of the schools and let in men and women, even without certification, to help the certified teachers bring out the best in every child? Why not bring in college students to perform the same function? Above all, why not turn back the energies of high school students themselves both on their peers and on those in grades below theirs? Surely this use of their resources would be both more satisfying and productive than is the plethora of distracting, fabricated activities in which our schools abound.

Why not also confront, as we tried in the Yale Summer High School to do, the potentialities of auto-learning devices, whether between covers made of paper or sides made of metal or plastic, instead of backing away from them? These devices can enable a good teacher to teach just as effectively several times the number of students as he might without their utilization. It is not the device which is effective, but rather the teacher whom it permits to be freed for the personal teaching of those who most need attention.

A student will respond with infinitely more enthusiasm to attention directed toward him as an individual human being than he will to that



directed toward him as only one in a group, however large or small. Somehow we must manage the effort to find the people, and if necessary pay the costs required, to bring an individual student together with an individual teacher. I am convinced that the resources are at hand if we will only look for them.

\* \* \*

We did not expect to be able in seven weeks to improve significantly the intellectual achievements of our students. That we did effect any improvement at all was a gratuitous surprise. The overarching goal toward which all our efforts were bent was to work positive changes in the attitudes of our students toward learning itself, changes which would result in significant intellectual growth in succeeding years.

We set out to convince our students that there are many different paths to learning, of which any can be accurate for some students, and that although all are demanding, the right one for any student will inevitably be strewn with delights. Perhaps the greatest discovery made by our students was that there is no single way to learn which is equally appropriate to all.

\* \* \*

We learned many things about our students. Perhaps the most impressive revelation was one about ourselves, and this was that, even though constantly guarded against, the tendency of our society to demand less than that of which the individual is capable pervades all of us. Even our teachers at the Yale Summer High School, chosen especially for a firm grasp of their substantive disciplines and their success in imparting their knowledge to adolescents, several times during the course of the summer voiced fears that we were pushing our students too hard. They were profoundly shaken by the fact that virtually every single student, in private discussion with me, emphasized his feeling that we could have demanded--and freely gotten--more work of finer quality than we did obtain.

This impression points up one of the most serious shortcomings of our schools--the unwarrantedly low expectations of many many teachers with respect to the learning ability and desire of their students. When a student fails to respond to a challenge in the way in which the teacher anticipated, the fault may lie in the method or in the teacher; it will rarely be in the student.

Much has already been said of the subtle way in which the pre-conceptions respecting ability which teachers of the disadvantaged bring to their classrooms operate to depress the level of learning in their students. It seems clear, however, that such expectations affect the quality of student performance in all kinds of schools, whether attended by advantaged or disadvantaged students.

\* \* \*

Has the Yale Summer High School been effective? Has the record thus far justified the admittedly large amounts of money expended in this, as in other programs of compensatory education?

For anyone who has been close to the Yale Summer High School, the answer, though clearly subjective, is strongly in the affirmative. Euphoria, even when based on the most accurate of perceptions, has a way of welling up out of all endeavors of this kind. I can be unequivocal in my statement that we do not need anything more than we already know to be convinced of the value and effects of what we have done.

Others, perhaps with justification more sanguine, may require proof, and for them I suggest the following, still incomplete, statistics:

At the time this report went to press, we had received from sixty of the 103 students in the 1964 Session information on college admissions. Of the number replying as of this date, two still had one more year to go in the preparatory schools in which they had been placed by the Yale Summer High School, one had decided to spend a post-high school year in an imaginative program for a transitional year between high school and college established by Mr. Charles McCarthy of the Cooperative Program for Educational Opportunity, and one was in the U.S. Marine Corps. All of the remaining students had been admitted to, and would attend, college, many going to the leading institutions in the nation.\* I think it is safe to conclude that some of these students would not have gone on to college, and

---

\*Alabama Southern (1); Alleghany (1); Bentley College (1); Boston College (1); City College of New York (1); Colgate (1); Columbia (1); University of Connecticut (1); Dartmouth (2); Drexel Institute of Technology (1);

others would never even have applied to the institutions to which they were admitted, had there not been a Yale Summer High School. I am not risking immodesty in making this assertion, as I was not the Director of the 1964 Session. The credit is richly deserved by John Ellsworth.

At the time this report went to press, we had received from the teachers or guidance counselors of 79 of the 107 tenth grade students in the 1965 session information on their performance in the eleventh grade. Of the number about whom we have information, fifty were reported to have improved significantly in achievement, in their attitude toward learning, and in their contribution to school life. Fourteen were reported to have improved in one or more of the categories, but not all. Twelve were evaluated as performing at the same level as before they attended the Yale Summer High School, and three--including those who had dropped out of school--were doing less well. Many of the changes were described by the school officials as being dramatic reversals of a prior course.

Many have begun to achieve honors in their school and civic activities, and many have been admitted to advanced placement and honors courses to which they had been refused entry before. Some students were being used to tutor other students.

\* \* \*

---

Fairleigh Dickinson University (1); Fisk (1); Georgia Institute of Technology (1); Georgia (1); Hampton Institute (2); Harvard (2); Howard University (2); Lincoln (Pennsylvania) (1); Long Island University (1); Macalester (1); Maryland (1); Missouri (1); Monmouth College (1); New Hampshire (1); New Haven College (1); North Carolina Agricultural and Technical College (1); North Carolina State University (1); Pennsylvania (1); Princeton (1); Providence (1); Queens (CUNY) (1); Rensselaer Polytechnic Institute (2); Rutgers (1); South Carolina (1); Trinity (Hartford) (2); Tulane (1); Vanderbilt (1); Wesleyan (Connecticut) (2); Williams (2); Yale (8); with one undecided.



We are not claiming for ourselves the ability to work miraculous changes in human beings, to accomplish that which the schools cannot. That the schools have not succeeded with these students is a matter of record. That they cannot is certainly neither tested nor established nor even suggested. In trying to stimulate our students to begin to realize fully their potential, we had both the advantage of being able to bring the students to an entirely new place in which to attempt a re-introduction to the joy of learning, and also the means to focus on them the attention of a rich array of human beings, both professional and amateur, in sufficient number to open a door just slightly. Any school, with the proper public support and administrative leadership, can open that door more widely than we, if only it will seek out the people who are the key.

\* \* \*

"Education is an important thing, the loaves and fishes to feed the multitude of the questions of the mind."

Larry Ahart, Little Rock, Arkansas  
Yale Summer High School, 1965

## XIX. CONCLUSION

We believe that the program described above, despite the many ways in which it might be improved, was effective -- effective in beginning to convince each student of his capacity to perform rigorous intellectual tasks, in starting to equip each student with those basic skills which he lacked, and in exposing the student to a richly varied cultural and intellectual experience. We hope that the Yale Summer High School inspired in the student the confidence he needed and imparted to him the kind of vision -- one of difficult but attainable goals -- which he must have if he is to perform consistently up to the highest level of his ability. We hope that the excitement he sensed in the learning process at the Yale Summer High School and the examples set for him by the people who tutored and taught him there will inspire him to exploit his own talents more fully and will raise his aspirations to a level commensurate with his abilities. We hope above all that each of the students has responded to the challenge of the summer high school by committing himself to pursuing on his own the development of his latent abilities. If, rather than merely responding to the external pressures of the program, he was able to internalize some of its values and goals, he will be challenged by his own self-respect to pursue life so as to be able to make his greatest possible contribution to society.





## APPENDICES

### APPENDIX I

#### "LOVE, STYLE, AND EXCITEMENT"

The eminent and caustic social critic, Mr. Paul Goodman, wrote a book a couple of years ago (now available in paper back) to which he gave the provocative and not entirely clear title GROWING UP ABSURD. The idea of the book (or one of them) was that it is pretty hard for kids to grow up in this so-called American culture of ours, where (according to a recent study from which Goodman quotes) 63% of the garages and 65% of the radio repair shops are crooked, -- but where only a reassuring 49% of the watch repairmen "lied, overcharged, or gave false diagnoses". How can a young man, Goodman asked, keep his ideals in a culture debilitated by petty corruption, phony advertising, confidence rackets of all sorts, Madison Avenue hypocrisy; indeed, in a country where the main idea is the fast buck. (And I shall add to his withering series of examples the most damning I ever struck -- in yesterday's NEW YORK TIMES. An American businessman commenting on the war in Vietnam is quoted as having said: "The war is a pretty good way to make money as long as you haven't got anybody in it.") No wonder, Goodman says, we have Beatniks and Rebels Without a Cause. Boys want to become men, not phonies; and if society frustrates their better inclinations, they will find ways of working off their frustrations through their worse. Jobs are rarely done these days, he concluded in a phrase which is in lovely contrast to his usual biting and sardonic rhetoric, with "love, style, and excitement." .....

"Love, style, and excitement." I haven't been up here at the YSHS this summer as much as I wish I had. But I keep my ear to the ground; I have my agents; and I think I know pretty well what's been going on. (Aren't I Chairman of the Board??) It's very clear to me -- as it must be even to the most casual observer -- that the job here this summer has been one of those rare ones done with love, style, and excitement. And this not only by the extraordinary group of administrators, teachers, and tutors assembled here but (much more importantly) by you.

Look: you don't have to tell me that all judgments like this are relative, that it's easy for an outsider to sentimentalize the whole thing and paint a pretty picture. I know there have been times when some of you'd wished you'd never come, or were some place else, or (for that matter) had never been born; that some few of you goofed; that there were times when style lapsed into bungling, when excitement gave way to boredom, when love was momentarily forgotten in irritation. (One of my agents reported a very disturbing bit of evidence: Tappy Wilder was seen in a tee shirt emblazoned with the inscription, "I HATE KIDS." Very disturbing. I'll have to take that up with the Board.)

But take another look: in all honesty, when have you ever had it so good? -- with (relatively speaking, if you must) good food, wonderful surroundings, sports, friends, trips, entertainment, and (in case you still don't know it) absolutely blue-chip instruction. When have you ever learned so much in so short a time -- and I don't mean just the New Math or the Old English and with (relatively speaking!) such pleasure? When have you ever been surrounded with so much good will and so much concern (which are other terms for love)? -- To repeat the cliché: when have you ever had it so good? (I suggest that many of you won't realize how good until ten years from now.)

Question: has it been too good? Have we spoiled you? Have we unfitted you for the rough and tumble of the world you'll return to? Will there be a real problem of re-entry? This is a possibility -- and, quite frankly, it was a risk we took. Will you go back and bellyache about the system in PS 14 in Minneapolis because they don't do things quite the way we used to do them back at old YSHS? Will you sneer at poor Miss Higginbotham because she never heard of WFF'N Proof, or poor Mr. Jones because he can't make a class of 40 go the way the seminars for '10 went in YSHS? Will you upstage your classmates in Cleveland because they've never seen the Yale Bowl or swam in the Yale pool? Will you go back to your mother's cooking and call for three desserts and a choice of entrees and four glasses of milk per meal?

Yes, perhaps you will! And there's no reason why, now that you know what high standards are, you shouldn't do your best to raise the standards (though I'd spare your mother) in the communities to which you return. But you will create nothing but trouble for yourself and everybody else, you will make re-entry a real problem, unless you have learned the most important of all the things we've tried to teach you this summer (although you may never have realized it) -- more important than WFF'N Proof, more important than Plato, more important than grammar and spelling, Shakespeare and Hemingway. It is the one thing that transcends all the rest and sums it up. Let me put it in a paraphrase of I hope you'll know what: "And now abideth these three: Love, Style, and Excitement -- and the greatest of these is Love. Love suffereth long and is kind. Love vaunteth not itself, is not puffed up...." Love has humor, and tact, and compassion, and pity. Love is patient and forgiving, even unto the Miss Higginbothams, the Mr. Joneses, and the harassed administrators of PS 14. If you haven't got a sense, here this summer, of what I'm talking about, you've missed the whole point, and our mission with you will have failed. But I don't see how anyone could have missed it completely. And it is never too late. The time may be, for some of you right now, at this very moment as I speak....I thought I'd better tell you, now that you're in the mood.

R.B. Sewall  
Commencement, Yale Summer  
High School, August 12, 1965



## APPENDIX II

### RESEARCH REPORT of the YALE SUMMER HIGH SCHOOL

EDWARD B. KLEIN, PH.D.  
and  
LAURENCE J. GOULD, PH.D.

#### Objectives

The Yale Summer High School is an experimental-demonstration undertaking of Yale University for underachieving boys from backgrounds of cultural, economic and educational disadvantage. This report attempts to assess the immediate effectiveness of a short term educational intervention in working positive changes in the attitudes, aspirations, and achievement of those students attending the Yale Summer High School in the summer of 1965. In addition, we have addressed ourselves to the task of determining the relative effectiveness of the varied curricula and teaching devices utilized. Selected standard and specially devised tests were employed in evaluating the effects obtained and the methods used.

#### Samples

The sample consisted of 117 boys recommended from approximately 100 co-operating high schools and talent-discovering organizations throughout the country. All but ten of the boys were in the tenth grade, of high intellectual potential, academically underachieving, and from economically depressed circumstances. Two-thirds of the students came from urban areas and one-third from rural. Approximately one-half were from the North and the other half from the South. With respect to racial composition, 56 were white, 54 were Negro, and 7 were American Indians. Many ethnic subcultures were represented among the white students. All in all, the Yale Summer High School student body can be described as broadly representative of the nation geographically, racially, ethnically, and regionally.

In addition, a control group of 18 tenth graders from Hillhouse High School in New Haven was included for comparison purposes.

#### Testing Procedures

An extensive battery of measures of intellect, personality, and attitude was administered to all boys during the first and last weeks of the summer program. In addition, we obtained complete demographic data and a sociometric index of friendship patterns. To obtain some measure of the extent to which scores improve simply as a result of a student's taking the same test twice, the control group of Hillhouse students was also tested twice, with a lapse of seven weeks in between, on all of the personality and attitudinal measures.



### Initial Differences

Table 1 contains the results of an analysis of personality differences between white and non-white students at the beginning of the summer. In summary these suggest the following:

Non-whites seem to have a greater "need for approval", deny pathology more often on the MMPI, have a greater negativism toward the poor, be more authoritarian, have a higher "self concept" and, most impressively, score lower on eight of twelve mood factors (i.e., "aggression", "hostility", "ego", etc.).

Measured against the Hillhouse control group of both white and non-white boys, the non-white Yale Summer High School students seem to deviate most from the other groups. They score lowest on seven of the twelve mood factors and highest on "self concept", "need for approval", "denial of pathology", etc. (Table 2). Comparisons of the differences between white and non-white students within the Yale Summer High School and the differences between the non-white students at Hillhouse and those within the program suggest the following conclusions, so far as initial personality differences are concerned:

The syndrome of personality traits sketched above suggests that the non-white Yale Summer High School boys manifest greater denial and rigidity than the other boys in the program or the control subjects. Since the non-white Yale Summer High School boys are the most deviant sample it may be hypothesized that these personality differences represent the price that they have paid for their striving for acceptance by middle class society. These non-white boys of lower economic class backgrounds appear to have turned themselves into caricatures of their idealized images of white middle class society in order to gain acceptance by that society. Understandably, white Yale Summer High School students, also from lower economic class backgrounds, do not have to exact of themselves such a toll in order to facilitate their upward mobility. An alternative hypothesis deals with "impression management" on the part of the non-white students when being tested by white psychologists. That is, non-white students, by stressing the personality characteristics mentioned above, might have tried to control the impression that the white tester had of them.

Table 3 summarizes the intellectual differences between the white and non-white students at the beginning of the summer. The five intellectual scores employed as criteria were derived from the Preliminary Scholastic Aptitude Test (PSAT) of the Educational Testing Services. It appears that

there were significant differences between scores of white students and those of non-white students. These differences may clearly reflect the depressing effect of segregated schooling.

#### Effectiveness of the Program

In order to test for the overall effectiveness of the Yale Summer High School program several analyses were carried out utilizing the five criteria measures derived from the PSAT. The scores represent the difference between the student's test performance during the last week of the program and his first week's test results. A positive score, therefore, represents improvement over time. As can be seen in Table 4, the group as a whole seemed to improve significantly on each of the criteria measures. As a control group on these intellectual measures was not available, however, results must be interpreted with caution because it is clearly possible that the changes detected resulted from practice in taking the tests and familiarity with them, rather than heightened motivation for learning.

Tables 5 and 6 represent respectively the analyses of score change as between urban and rural students and white and non-white students. In summary, urban and white boys improved on more of the intellectual measures than did rural and non-white students. These findings are consistent with the initial intellectual scores and again probably reflect the significantly poorer quality of education in both rural and segregated schools.

The most important question, however, is whether or not there is a difference between these groups in the amount of improvement, and those results are reported in Table 7. From this table it is safe to conclude that both non-whites and whites as well as both urban and rural boys were all positively affected by the program and significantly benefited from it. It seems hardly necessary to add that no group was adversely affected. The finding that there are no significant disparities between the difference scores leads to the conclusion that the major subgroups within the program were not differentially affected by their experience and that all groups, regardless of background, demonstrated ability to learn from the summer program.

A separate task undertaken was the investigation of the relative effectiveness of various teaching methods. First of all, we attempted to compare the test results obtained by students enrolled in the WFF'N Proof course with those obtained by students not so enrolled. Second, we compared the sections in mathematics, each of which employed distinct methods of instruction: 1) standard lecture-text-problem solving, 2) programed, and 3) advanced (Topics in Algebra; Geometry; Computer Science).



Table 8 compares the PSAT change scores for students participating in the WFF'N Proof with those of students who did not. As can be seen, both groups improved significantly on three of the five criteria measures. More important, Table 9 indicates that there appeared to be no statistically significant differences between the two WFF'N Proof groups on any comparisons of the differences of change scores. In addition to the testing of the overall effectiveness of the WFF'N Proof program, other analyses were carried out to see if it had a different effect on racial or regional subgroups. Tables 10 and 11 indicate that neither race nor region appears selectively related to the WFF'N Proof experience.

The different procedures utilized in the mathematics course were tested by method, brightness of students, and by race of student.

Table 12 suggests that race of student and teaching methods (standard, programmed or advanced) do not lead to significant change in intellectual performance. Table 13 indicates that the race and brightness of the student is not related differentially to change in intellectual scores.

The English course was not systematically varied by method and race and sex of the teacher, and therefore only the relationships between the race of student, race of teacher and personality of teacher could be tested in any meaningful way. Table 14 indicates that neither the race of the student, nor the race of the teacher significantly affected intellectual performance. Table 15 shows that race and personality of teacher do not differentially effect change in intellectual scores.

The above analyses suggest that neither the WFF'N Proof game nor the various mathematical instructional techniques employed differentially affected student intellectual performance. These results held without regard to race or regional background of the student. The results for the English course parallel the above in that neither racial and regional background of the student nor the race and personality of the teacher appeared to affect significantly student performance. These findings are somewhat qualified by other data which will be discussed later. One qualification which should be noted here is that the structure of the English program did not lend itself to a strict evaluation of the different English teaching methods.

#### Sociometric Choice

As mentioned previously, each student was asked during the second and seventh weeks of the program to choose the three boys he liked best. Table 16 indicates that by the end of the summer white students were selecting significantly more within their own race than were non-whites. Though the difference of change scores over the summer is not statistically



significant, there is a trend for within-race choices to increase for the white group and to decrease for the non-white group. In general, both groups selected whites more often in the seventh week than they did initially. The authors feel that there are subtle social and academic reasons for this greater selection of whites to which we shall address ourselves later in this report.

#### Personality Changes over the Summer

An analysis of personality change scores was carried out for the total sample as well as for white and non-white students separately. However, since there were few race differences associated with personality change, one may view these findings, as summarized in Tables 17 and 18, as reflecting the effect of the experience on the total group. In general, at the end of the summer, as compared with the beginning, Yale Summer High School boys scored significantly lower on the following measures: "intolerance of ambiguity", "authoritarianism", "happiness" and "concentration", while becoming significantly more "alienated", "machivellian", "aggressive", "hostile", "deactivated", and displayed more "negative anxiety" (i.e., nonchalance, sarcasm) and "negative emotion" (i.e., geniality, sociability, calmness). These results suggest a positive change in intellectual and personality flexibility, more evidenced by increased feelings of apprehension and alienation two days before returning to their home community, after what they felt was a very exciting and stimulating summer experience. Since control group data is available on all of the above personality measures it is of interest to note that the Hillhouse group tended to move in the opposite direction from the experimental group (i.e., when the control group changed positively, the Yale Summer High School boys changed negatively and vice-versa). One may therefore conclude, on the basis of this control group data, that the personality and attitudinal changes represent meaningful shifts. (See Table 19).

#### CORRELATES OF INTELLECTUAL PERFORMANCE

There are fairly obvious demographic correlates of initial intellectual performance such as social class, family income, mother's occupation and education, and IQ of the student. Most impressively, a number of personality variables were significantly related to all five PSAT criteria measures. The strongest personality correlates of initial intellectual scores -- "alienation", "intolerance of ambiguity", and "authoritarianism", were negatively related to performance, and "feelings of security" was a positive correlate. Additional positive correlates of intellectual performances included "temporal orientation", "attitude toward mathematics", "level of aspiration" and "feelings about politics", all derived from a scale developed

by Professor Leonard Doob. In addition, boys who reported overprotecting and dominating fathers tended to score lower on the intellectual test battery, whereas those reporting overprotecting mothers did well. The following mood factors were also positively correlated with intellectual performance: "negative anxiety", "ego", and "deactivation". Finally, those boys who scored high on "test taking anxiety", "social restrictiveness toward former mental patients", "acquiescence" and "self-concept potency", as compared with those who did not, tended to perform poorly in the initial intellectual test (see Table 20). It is important to note that all but two of the above demographic and personality correlates of initial intellectual performance favor whites over non-whites. In general, whites come from more middle class homes and scored lower on the negative and higher on the positive correlates of intellectual performance. These demographic and personality differences, which are presumably related to motivational-affective factors, may explain the intellectual discrepancies between white and non-white students.

There were few demographic and personality correlates of change in intellectual performance. In general, the relationships between the individual measures and change scores were weaker than those between similar personality variables and initial intellectual ability. Students reporting overprotecting and ignoring fathers as well as overprotecting and dominating mothers tended to change more in a positive direction. High scores on the Doob scales of "politics", "science", "aspiration", and low scores on "security" changed in a positive direction. The following personality variables were also positively related to intellectual change scores: "attitude toward the poor", "social restrictiveness toward former mental patients", "feeling of optimism", "trust", "authoritarianism", "intolerance of ambiguity", and "non-machiavellianism". Finally, students who were high on the mood factor of "activation", and on the Doob measure of "conception of other people" as well as those who had mothers with high occupational skills tended to change somewhat more in a positive direction.

One may summarize the findings as indicating that boys from higher social class homes, even within the restricted range of our sample, and those who are more optimistic and less rigid have higher initial intellectual scores. The correlates of intellectual change were few and weak, and we would not feel comfortable in interpreting them.

#### CORRELATES OF SOCIOMETRIC CHOICE

The most striking finding with regard to sociometric choice selection within own race is the fact that there are many more correlates for white students selecting other white students than for non-whites selecting other



non-whites. On the first testing occasion, white students who selected a high percentage within their own race had the following characteristics: they came from large cities, had families with higher incomes, scored high on "feelings of security", and were low on "trust" and "acquiescence", and tended to report their mothers as not being dominant or ignoring. The only personality correlate among non-whites, on initial testing, was reporting that their mothers were not dominant. Testing during the last week of the Yale Summer High School revealed that whites who chose other whites scored high on "social affection" and low on the mood factors of "ego", "deactivation" and "hostility". Most impressively, the following intellectual scores emerged as determinants of sociometric choice among whites: Verbal National Percentile, Mathematics National Percentile and Algebra scores. For non-whites there were only three correlates of sociometric choice within own race; namely, low scores on the "optimism" and "trust" scales and high scores on the "social restrictiveness towards former mental patients" scale. (See Table 21). One may tentatively conclude that there were several demographic and personality correlates of initial sociometric choice for white students and that the major determinants of such choices were intellectual measures on the last testing session. This would seem to indicate a subtle differential selection process on the part of bright white boys who tended to select more often within their own racial group as the summer progressed.

As for the other sociometric choice with respect to the number of times a boy is chosen, which would appear to measure a general factor of popularity, non-whites had many more correlates than did whites. During the first testing session non-white boys who were chosen often had the following characteristics: high on "self-concept potency", "negative emotion", "optimism", "social affection", "conception of people", "deactivation", "non-egoistic", "little interest in politics", "ignoring mothers", came from homes where the fathers had a lower occupation level and family income, as well as scoring lower on the mathematics and verbal tests and the national percentile scores associated with these two intellectual measures. On initial testing, whites who were chosen often were high on "anxiety", "need for approval", "denial of pathology", "happiness", "negative anxiety", "social affection" and tended to report that they had non-ignoring mothers and non-dominating fathers. On the post-testing the whites had only three correlates of how often they were chosen: "negative emotion", "self-concept evaluation", and "percent of sociometric choice within own race". On the other hand, non-whites still had as many of the background and personality correlates as they did initially. These variables included high scores on "deactivation", "negative emotion", "self-concept evaluation", "optimism", "social affection", "happiness", "concentration" and a low score on three of the five PSAT measures.



In general, one may characterize the frequently chosen boys of both races as being a group of students who present a strong, out-going concern for other people, and who have a high self-concept. In addition to this general picture, frequently chosen non-white students in the Yale Summer High School had the added qualities of being happy, active, and more concerned individuals who also tended to do poorly on PSAT measures (See Table 22).

#### Interpretation of the Program

On the basis of the analyses reported herein, one may conclude that the overall program was effective with respect to inducing positive changes in intellectual growth and personality development of the total group. The Yale Summer High School would also appear to have a fairly uniform effect on both urban and rural and white and non-white students. The personality changes indicate a loosening of certain rigid standards, plus some anxiety and anger engendered by a return to what is frequently, at best, a less than ideal home situation. All of the analyses lead to the conclusion that none of the various teaching methods enhanced student performance in this setting any more than did others. There is some suggestion in the data, for a small group of students, where such a test was possible, that the sex and race of the teacher may play a role in student performance, but this hypothesis remains to be tested in future programs. There also are subtle indications that it is the brighter white boys who display greater prejudice as the summer progresses.

#### INTERVIEW MATERIAL

In order to examine in greater depth some of the issues touched upon in the various questionnaires, a stratified sample of 20 boys, selected randomly within race and urban-rural residence, was interviewed for an hour or two during the last week of the program. These taped interviews were semi-structured around a number of factors considered to be most pertinent in the background of these boys, and around issues bearing on the impact of the Yale Summer High School. Although both a content and a linguistic analysis has yet to be undertaken, the material presented here represents a summary overview of the responses to the various questions.

For the most part the boys were greatly impressed by the quality of instruction and the personal attention that they received from the teachers. They felt that the Yale Summer High School teachers were better prepared and "more interesting" than were the teachers in their local high schools. In addition, they felt that the teachers were personally concerned that each student understand the work. These responses were particularly marked for rural and non-whites boys, and probably reflect the generally poorer quality of rural and segregated-urban high schools.

While the boys thought that the program was challenging and exciting, most reported that they expected it to be more difficult (structured and regimented). In this respect, they were pleasantly surprised to find that the Yale Summer High School was quite different from their own high schools (presumably the basis for their expectations), and by comparison felt that the Yale Summer High School was more "exciting", "fun", "challenging" and "varied". They were also most struck by the competence, enthusiasm and interest of the tutors. While their enthusiasm seemed genuine and spontaneous, the boys were reluctant to say anything negative about the program. Complaints, when voiced at all, were usually specific and prosaic ("some of the meals", "one of the speakers", etc.). No doubt, this reluctance is due in part to their perception of the interviewers as part of the establishment. However, it is interesting to note that this pattern of denial also pervades their responses on many issues not directly related to the program (see below), and is particularly marked among the non-white students. It should be noted that the non-white boys have a high "need for approval" and tend to deny negative feelings and thoughts.

In response to the queries concerning their aspirations and their possibilities for the future, the boys were generally positive and optimistic. However, most were rather vague about specifics, and given to generalities about getting the good education necessary for career and occupational success. When concrete goals were mentioned, the boys seemed to be relatively uninformed about what would be required in the way of education and training. That is, their temporal orientation and knowledge concerning education did not extend past college (and in some cases not beyond high school!). Few of the boys had any clear idea about the requirements and structure of graduate or professional training, although they most often mentioned jobs and careers requiring such. In addition, the non-white students were asked if they felt their race to be an obstacle to the pursuit of their goals. Generally, they denied that being a member of a racial minority handicapped them in any way. In fact, they tended to deny, or to evade, the suggestion that prejudice existed in this country, except in the most superficial way; yet they often mentioned their surprise about how "friendly" and "accepting" the boys and the staff were at the Yale Summer High School, and frequently voiced a concern about "fitting in", though this was not couched in racial terms. While it is again probable that the race and the perceived role of the interviewers were at least partially responsible for the quality of these responses, the respondents seemed to have an investment in denying any sort of limitation, whether it be in themselves, or in the structure of society as manifested, for example, by a frequent misunderstanding of the words "integrated" and "segregated" in their interviews). Put another way, their preferred mode of cognizing themselves and their society seems to be patterned on the stock American myths that hard work and virtue are rewarded regardless of race, religion, etc.



One last aspect of the interview material seems particularly noteworthy. In tabulating the responses on the admission application to the question "Who has been the most important influence in your life?", we found that approximately 85% of the students cited a female, usually their mother or a teacher. In raising this issue during the interviews the students were asked to describe their mothers and fathers and how they felt about them. The responses to this request were remarkably sketchy and platitudinous, and further probes and inquiries failed to elicit much additional information. Even given the general pattern of denying negative thoughts and feelings mentioned earlier, these responses were particularly glib and unilluminating. The boys who were generally articulate seemed to have very little to say about such matters beyond describing their mothers as hard-working, concerned about them, and shouldering the burden of the family. Rarely, however, did the father come in for special commendation or condemnation. While the boys spoke positively of their mothers, most of the responses fell in the oft-repeated category "She's like most mothers, I guess", the model apparently being the stereotyped "good mother". By contrast, most boys felt that, in general, girls (their peers) were a disruptive influence, and in a variety of ways viewed them with marked suspicion, fear and distrust. These feelings emerged most clearly in their unanimous rejection of the suggestion that the Yale Summer High School become coeducational. Among the most common reasons given for this stance were that "Girls fool around too much", "It's too hard to concentrate when they're around", "Girls are always getting you into trouble", etc.

#### Recommendations for Future Yale Summer High School Programs

On the basis of the preceding the following tentative recommendations are made for future Yale Summer High School sessions:

1. The housing assignments of the boys should be altered so that each group of ten can be varied with respect to racial composition. This procedure will allow for the study of the effectiveness of various racial compositions, over a number of summers, in order to ascertain both the most effective way of decreasing racial prejudice, as well as its influence on learning and performance in integrated settings.

2. Though the overall results of the program indicate insignificant changes in intellectual performance, the various teaching methods included in the design do not seem to be paramount factors in producing this change. The authors would recommend that a higher priority be given to an exploration of the dimensions of race and sex of teacher rather than varying methodology per se. These areas represent an as yet little explored field of education research. Some of the findings suggest that race and sex of the teacher may affect student performance. Though these findings are only



tentative in nature, the authors strongly feel that because of their potential implications they warrant further study in future programs. Indeed, the findings of the Moynihan report and Kenneth Clark's Dark Ghetto suggest that these are crucial areas in public and compensatory education.

3. In order to test further some of our assumptions, we are suggesting additional control groups as spelled out in grant proposals submitted to various agencies. It is also of major importance to mention that any findings of this study need to be subjected to re-evaluation in future Yale Summer High School sessions in order to draw valid conclusions about any aspect of the program. It is also recommended that additional psychological and cognitive tests be included in order to measure other important elements of intellectual and personality functioning. It is hoped that longitudinal follow-up studies will provide evidence bearing on some of the more speculative interpretations advanced in this report.

TABLE 1

INITIAL BACKGROUND and PERSONALITY MEASURES for  
WHITE and NON-WHITE YSHS STUDENTS

| Test                     | <u>White</u> |       | <u>Non-White</u> |       | t    | p     |
|--------------------------|--------------|-------|------------------|-------|------|-------|
|                          | M            | S.D.  | M                | S.D.  |      |       |
| Test Anxiety             | 59.71        | 21.35 | 59.92            | 24.97 | 0.06 | NS    |
| T-L Vocabulary           | 11.89        | 2.144 | 10.69            | 2.164 | 3.00 | <.005 |
| <u>Personality</u>       |              |       |                  |       |      |       |
| MC SD                    | 14.04        | 5.36  | 16.45            | 5.915 | 2.33 | <.05  |
| SK SD                    | 12.14        | 3.16  | 13.52            | 1.876 | 2.82 | <.01  |
| ARS                      | 65.33        | 11.34 | 65.34            | 10.34 | 0.05 | NS    |
| Alienation               | 64.74        | 15.82 | 68.02            | 14.67 | 1.17 | NS    |
| Trust                    | 44.02        | 10.00 | 42.34            | 10.61 | 1.00 | NS    |
| Optimism                 | 31.39        | 5.476 | 31.21            | 5.308 | 0.18 | NS    |
| Intolerance of Ambiguity | 51.32        | 8.414 | 52.18            | 9.314 | 0.53 | NS    |
| Authoritarianism         | 55.65        | 8.092 | 58.87            | 8.005 | 2.18 | <.05  |
| Machiavellianism         | 70.53        | 15.41 | 71.49            | 15.62 | 0.34 | NS    |
| SR                       | 32.07        | 8.60  | 31.67            | 8.652 | 0.25 | NS    |
| Poor                     | 37.89        | 7.98  | 33.87            | 7.845 | 2.75 | <.01  |
| <u>Moods</u>             |              |       |                  |       |      |       |
| Happy                    | 13.14        | 2.78  | 13.20            | 2.744 | 0.12 | NS    |
| Negative Anxiety         | 2.544        | 1.536 | 2.033            | 1.494 | 1.84 | <.08  |
| Ego                      | 3.211        | 2.05  | 2.180            | 2.094 | 2.78 | <.01  |
| Aggression               | 5.298        | 2.796 | 4.000            | 2.008 | 2.83 | <.01  |
| Depression               | 4.614        | 3.374 | 3.590            | 2.72  | 1.79 | <.08  |
| Anxiety                  | 5.281        | 3.49  | 4.115            | 3.14  | 1.92 | <.06  |
| Negative Emotion         | 6.228        | 1.74  | 6.672            | 1.67  | 1.41 | NS    |
| Deactivation             | 6.105        | 3.773 | 3.246            | 2.908 | 4.61 | <.005 |
| Activation               | 8.684        | 2.229 | 9.115            | 2.176 | 1.05 | NS    |
| Social Affection         | 8.965        | 1.908 | 9.393            | 1.926 | 1.22 | NS    |
| Concentration            | 7.223        | 1.513 | 7.328            | 1.338 | 0.40 | NS    |
| Hostility                | 2.596        | 2.658 | 1.262            | 1.870 | 3.19 | <.005 |
| <u>Social Background</u> |              |       |                  |       |      |       |
| # Sibs                   | 3.195        | 2.532 | 3.958            | 2.783 | 1.35 | NS    |
| Father's Education       | 10.19        | 3.340 | 10.13            | 3.455 | 0.08 | NS    |
| Father's Occupation      | 4.769        | 1.436 | 5.310            | 1.423 | 1.80 | <.08  |
| Mother's Education       | 10.68        | 3.311 | 10.56            | 2.710 | 0.20 | NS    |
| Family Income            | 4.571        | 1.625 | 3.977            | 1.655 | 1.67 | <.10  |
| School IQ                | 121.7        | 13.94 | 118.6            | 13.33 | 1.11 | NS    |

| Test                                    | <u>White</u> |       | <u>Non-White</u> |       | t    | p     |
|-----------------------------------------|--------------|-------|------------------|-------|------|-------|
|                                         | M            | S.D.  | M                | S.D.  |      |       |
| <u>Doob Scales</u>                      |              |       |                  |       |      |       |
| Temporal                                | 25.41        | 4.310 | 25.40            | 3.565 | 0.00 | NS    |
| Mathematics                             | 23.52        | 4.391 | 23.79            | 5.049 | 0.49 | NS    |
| Aspiration                              | 24.73        | 4.510 | 24.58            | 4.321 | 0.05 | NS    |
| Science                                 | 23.93        | 4.145 | 23.58            | 4.277 | 0.12 | NS    |
| Conception                              | 20.05        | 3.941 | 20.23            | 3.888 | 0.07 | NS    |
| Security                                | 27.20        | 5.133 | 27.10            | 4.214 | 0.03 | NS    |
| Precision                               | 20.84        | 4.281 | 21.31            | 5.104 | 0.15 | NS    |
| Politics                                | 20.09        | 4.339 | 19.88            | 4.087 | 0.06 | NS    |
| <u>Perception of Parental Attitudes</u> |              |       |                  |       |      |       |
| Father Overprotective                   | 6.275        | 3.847 | 6.818            | 3.308 | 0.73 | NS    |
| Father Dominant                         | 13.69        | 5.105 | 13.95            | 4.264 | 0.27 | NS    |
| Father Ignoring                         | 2.941        | 2.120 | 2.909            | 1.951 | 0.24 | NS    |
| Mother Overprotective                   | 8.200        | 3.659 | 8.018            | 4.123 | 0.25 | NS    |
| Mother Dominant                         | 12.84        | 4.207 | 13.13            | 4.951 | 0.33 | NS    |
| Mother Ignoring                         | 2.345        | 1.590 | 2.732            | 2.146 | 1.08 | NS    |
| <u>Concepts</u>                         |              |       |                  |       |      |       |
| Self Concept Potency                    | 44.54        | 5.756 | 48.00            | 6.868 | 3.02 | <.005 |
| Self Concept Evaluation                 | 65.36        | 8.055 | 69.41            | 7.183 | 2.85 | <.01  |
| Ideal Concept Potency                   | 53.91        | 6.162 | 54.15            | 6.195 | 0.19 | NS    |
| Ideal Concept Evaluation                | 78.16        | 5.137 | 77.25            | 6.375 | 0.84 | NS    |

\* Note: All tests are fully described in appendix.



TABLE 2

## INITIAL PERSONALITY MEASURES FOR THE CONTROL GROUP

| Test                     | <u>White</u> |       | <u>Non-White</u> |       | t    | P    |
|--------------------------|--------------|-------|------------------|-------|------|------|
|                          | M            | S.D.  | M                | S.D.  |      |      |
| Test Anxiety             | 53.57        | 11.87 | 45.40            | 22.70 | .97  | NS   |
| <u>Personality</u>       |              |       |                  |       |      |      |
| MC SD                    | 13.57        | 5.44  | 14.30            | 4.50  | .29  | NS   |
| SK SD                    | 12.00        | 1.29  | 12.80            | 2.82  | .79  | NS   |
| ARS                      | 65.14        | 7.29  | 67.80            | 10.72 | .61  | NS   |
| Alienation               | 80.57        | 10.34 | 77.70            | 12.93 | .51  | NS   |
| Trust                    | 34.86        | 7.38  | 40.50            | 9.76  | 1.36 | NS   |
| Optimism                 | 28.29        | 3.99  | 31.80            | 3.08  | 1.96 | <.07 |
| Intolerance of Ambiguity | 54.71        | 5.22  | 54.20            | 9.08  | .15  | NS   |
| Authoritarianism         | 57.29        | 8.16  | 60.00            | 7.69  | .69  | NS   |
| Machiavellianism         | 82.86        | 16.73 | 74.90            | 10.86 | 1.11 | NS   |
| SR                       | 38.86        | 4.60  | 33.00            | 9.53  | 1.68 | NS   |
| Poor                     | 37.29        | 6.95  | 41.40            | 9.97  | 1.00 | NS   |
| <u>Moods</u>             |              |       |                  |       |      |      |
| Happy                    | 12.86        | 2.91  | 12.89            | 1.83  | .02  | NS   |
| Negative Anxiety         | 2.43         | 1.27  | 3.00             | 1.58  | .94  | NS   |
| Ego                      | 3.85         | 2.79  | 4.00             | 2.45  | .11  | NS   |
| Aggression               | 6.00         | 2.31  | 6.67             | 3.71  | .44  | NS   |
| Depression               | 4.43         | 2.99  | 5.00             | 3.81  | .34  | NS   |
| Anxiety                  | 5.71         | 3.15  | 7.00             | 3.94  | .73  | NS   |
| Negative Emotion         | 5.86         | 1.35  | 6.00             | 1.12  | .22  | NS   |
| Deactivation             | 5.43         | 4.50  | 5.78             | 4.52  | .17  | NS   |
| Activation               | 9.57         | 1.90  | 8.89             | 2.20  | .66  | NS   |
| Social Affection         | 9.57         | 1.51  | 8.89             | 2.57  | .66  | NS   |
| Concentration            | 6.71         | 1.50  | 6.56             | 1.88  | .18  | NS   |
| Hostility                | 4.29         | 2.14  | 4.78             | 4.41  | .29  | NS   |
| <u>Concepts</u>          |              |       |                  |       |      |      |
| POT A                    | 45.71        | 6.40  | 46.40            | 6.17  | .22  | NS   |
| EVAL A                   | 66.71        | 5.88  | 64.10            | 9.37  | .70  | NS   |
| POT I                    | 52.86        | 4.98  | 50.30            | 8.01  | .81  | NS   |
| EVAL I                   | 74.14        | 10.42 | 73.40            | 9.95  | .15  | NS   |

TABLE 3

## INITIAL INTELLECTUAL MEASURES FOR WHITE AND NON-WHITE

## YSHS STUDENTS

| Test        | <u>White</u> |       | <u>Non-White</u> |       | t    | P      |
|-------------|--------------|-------|------------------|-------|------|--------|
|             | M            | S.D.  | M                | S.D.  |      |        |
| <u>PSAT</u> |              |       |                  |       |      |        |
| Verbal      | 45.18        | 11.06 | 41.11            | 10.56 | 2.04 | < .05  |
| Math        | 49.16        | 11.23 | 42.98            | 9.778 | 3.13 | < .005 |
| Verbal % *  | 75.28        | 26.16 | 70.33            | 25.34 | 1.10 | NS     |
| Math % *    | 68.16        | 27.38 | 56.23            | 26.55 | 2.40 | < .05  |
| Algebra     | 15.04        | 8.013 | 17.79            | 7.650 | 1.81 | < .08  |

\* - National Percentile Rank for Verbal

\* - National Percentile Rank for Mathematics

TABLE 4

## INTELLECTUAL CHANGE SCORES FOR THE TOTAL YSHS

| Variable   | D      | S.D.    | t    | P      |
|------------|--------|---------|------|--------|
| Verbal     | 2.0000 | 6.2790  | 3.25 | <.002  |
| Math       | 1.4348 | 6.7915  | 2.26 | <.03   |
| Verbal % * | 4.4234 | 14.9536 | 3.10 | <.0025 |
| Math % *   | 2.7000 | 15.0306 | 1.88 | <.06   |
| Algebra    | 4.1028 | 5.5422  | 7.62 | <.0001 |

\* - These refer to the percentile transformations of the verbal and mathematics scores.



TABLE 5

## INTELLECTUAL CHANGE SCORES FOR URBAN AND RURAL YSHS STUDENTS

| <u>URBAN BOYS</u> |        |         |      |        |
|-------------------|--------|---------|------|--------|
| Variable          | D      | S.D.    | t    | P      |
| Verbal            | 2.3678 | 6.1102  | 3.59 | <.001  |
| Math              | 1.0233 | 5.7147  | 1.65 | NS     |
| Verbal %          | 5.5476 | 15.3139 | 3.30 | <.002  |
| Math %            | 2.1446 | 15.3290 | 1.27 | NS     |
| Algebra           | 4.2125 | 5.4626  | 6.85 | <.0001 |
| <u>RURAL BOYS</u> |        |         |      |        |
| Variable          | D      | S.D.    | t    | P      |
| Verbal            | 0.8966 | 6.7260  | 0.71 | NS     |
| Math              | 2.6552 | 9.3054  | 1.51 | NS     |
| Verbal %          | 0.9259 | 13.4391 | 0.36 | NS     |
| Math %            | 4.4074 | 14.2134 | 1.61 | NS     |
| Algebra           | 3.7778 | 5.8660  | 3.35 | <.0025 |

TABLE 6  
INTELLECTUAL CHANGE SCORES  
FOR WHITE AND NON-WHITE YSHS STUDENTS

| <u>WHITE</u> |        |         |      |       |
|--------------|--------|---------|------|-------|
| Variable     | D      | S.D.    | t    | P     |
| Verbal       | 2.1091 | 5.6917  | 2.72 | <.01  |
| Math         | 2.4364 | 7.1899  | 2.49 | <.02  |
| Verbal %     | 3.7059 | 11.4110 | 2.30 | <.025 |
| Math %       | 5.0000 | 12.2719 | 2.88 | <.006 |
| Algebra      | 3.3000 | 4.9000  | 2.31 | <.025 |

| <u>NON-WHITE</u> |        |         |      |        |
|------------------|--------|---------|------|--------|
| Variable         | D      | S.D.    | t    | P      |
| Verbal           | 1.9016 | 6.8110  | 2.16 | <.04   |
| Math             | 0.5167 | 6.3259  | 0.63 | NS     |
| Verbal %         | 5.0333 | 17.4851 | 2.21 | <.035  |
| Math %           | 0.7119 | 16.9136 | 0.32 | NS     |
| Algebra          | 4.8070 | 6.0043  | 5.99 | <.0001 |

TABLE 7

COMPARISONS OF INTELLECTUAL CHANGE SCORES BETWEEN  
URBAN VS. RURAL AND WHITE VS. NON-WHITE YSHS STUDENTS

| Variable | <u>RURAL</u> |       | <u>URBAN</u> |       | t    | P  |
|----------|--------------|-------|--------------|-------|------|----|
|          | D            | S.D.  | D            | S.D.  |      |    |
| Verbal   | 0.90         | 6.73  | 2.37         | 6.12  | 1.04 | NS |
| Math     | 2.66         | 9.31  | 1.02         | 5.71  | 0.89 | NS |
| Verbal % | 0.93         | 13.44 | 5.55         | 15.31 | 1.50 | NS |
| Math %   | 4.41         | 14.21 | 2.14         | 15.33 | 0.70 | NS |
| Algebra  | 3.78         | 5.87  | 4.21         | 5.46  | 0.34 | NS |

| Variable | <u>WHITE</u> |       | <u>NON-WHITE</u> |       | t    | P  |
|----------|--------------|-------|------------------|-------|------|----|
|          | D            | S.D.  | D                | S.D.  |      |    |
| Verbal   | 2.11         | 5.69  | 1.90             | 6.81  | 0.18 | NS |
| Math     | 2.44         | 7.19  | 0.52             | 6.33  | 1.51 | NS |
| Verbal % | 3.71         | 11.41 | 5.03             | 17.49 | 0.48 | NS |
| Math %   | 5.00         | 12.27 | 0.71             | 16.91 | 1.54 | NS |
| Algebra  | 3.30         | 4.90  | 4.81             | 6.00  | 1.43 | NS |



TABLE 8

INTELLECTUAL CHANGE SCORES AS A FUNCTION  
OF "WFF'N PROOF" GAME EXPERIENCE

| <u>"WFF'N PROOF"</u> |        |         |      |        |
|----------------------|--------|---------|------|--------|
| Variable             | D      | S.D.    | t    | P      |
| Verbal               | 1.8989 | 6.7370  | 2.65 | <.01   |
| Math                 | 1.0568 | 7.0863  | 1.39 | NS     |
| Verbal %             | 4.6941 | 16.5271 | 2.60 | <.01   |
| Math %               | 1.8810 | 15.5086 | 1.11 | NS     |
| Algebra              | 4.1461 | 5.5933  | 6.95 | <.0001 |

| <u>NO "WFF'N PROOF"</u> |        |         |      |      |
|-------------------------|--------|---------|------|------|
| Variable                | D      | S.D.    | t    | P    |
| Verbal                  | 1.7222 | 5.0504  | 1.41 | NS   |
| Math                    | 3.1667 | 5.5757  | 2.34 | <.03 |
| Verbal %                | 3.7056 | 9.6292  | 1.54 | NS   |
| Math %                  | 8.0000 | 15.0541 | 2.13 | <.05 |
| Algebra                 | 3.8889 | 5.4329  | 2.95 | <.01 |

TABLE 9

COMPARISONS OF INTELLECTUAL CHANGE SCORES AS RELATED TO  
"WFF'N PROOF" GAME EXPERIENCE

| Variable | <u>"WFF'N PROOF"</u> |       | <u>NO "WFF'N PROOF"</u> |       | t    | P  |
|----------|----------------------|-------|-------------------------|-------|------|----|
|          | D                    | S.D.  | D                       | S.D.  |      |    |
| Verbal   | 1.90                 | 6.74  | 1.72                    | 5.05  | 0.13 | NS |
| Math     | 1.06                 | 7.09  | 3.17                    | 5.58  | 1.39 | NS |
| Verbal % | 4.69                 | 16.53 | 3.71                    | 9.63  | 0.34 | NS |
| Math %   | 1.88                 | 15.51 | 8.00                    | 15.14 | 1.52 | NS |
| Algebra  | 4.15                 | 5.59  | 3.89                    | 5.43  | 0.18 | NS |

TABLE 10

RESULTS OF ANALYSIS OF VARIANCE OF MATHEMATICS SCORES  
FOR WHITE VS. NON-WHITE STUDENTS BY  
"WFF'N PROOF" GAME EXPERIENCE

| Source          |     | df  | ms    | F    | P  |
|-----------------|-----|-----|-------|------|----|
| Race            | (A) | 1   | 3.74  | 0.08 | NS |
| "Wiff 'n' Proof | (B) | 1   | 61.78 | 1.32 | NS |
| A x B           |     | 1   | 44.30 | 0.94 | NS |
| Error           |     | 102 | 46.89 |      |    |
| Total           |     | 105 |       |      |    |

Note: This table compares the 88 boys who played the "Wff'N Proof" Game to the eighteen who did not have the experience. Analyses of Variance were carried out for the other four PSAT measures with similar results.



TABLE 11

RESULTS OF ANALYSIS OF VARIANCE OF MATHEMATICS SCORES  
FOR WHITE URBAN VS. NON-WHITE URBAN BOYS BY  
"WFF'N PROOF" GAME EXPERIENCE

| Source         |     | df | ms    | F    | P  |
|----------------|-----|----|-------|------|----|
| Race           | (A) | 1  | 13.22 | 0.39 | NS |
| "Wff 'n Proof" | (B) | 1  | 27.98 | 0.83 | NS |
| A x B          |     | 1  | 33.33 | 0.99 | NS |
| Error          |     | 75 | 33.58 |      |    |
| Total          |     | 78 |       |      |    |

Note: Analyses of variance were carried out for the other four PSAT measures with similar results.

Table 12

RESULTS OF ANALYSIS OF VARIANCE OF MATHEMATICS SCORES BY  
RACE OF STUDENT AND MATHEMATICS TEACHING METHODS

| Source      | df  | ms     | F    | P  |
|-------------|-----|--------|------|----|
| Race (A)    | 1   | 122.59 | 2.60 | NS |
| Methods (B) | 2   | 39.61  | 0.84 | NS |
| A x B       | 2   | 32.19  | 0.68 | NS |
| Error       | 100 | 47.20  |      |    |
| <hr/>       |     |        |      |    |
| Total       | 105 |        |      |    |

Note: Methods refer to standard, programmed or advance teaching procedures. Analyses of Variance were carried out for all of the PSAT scores, but Algebra, with similar results.

Table 13

RESULTS OF ANALYSIS OF VARIANCE OF MATHEMATICS SCORES  
BY RACE AND BRIGHTNESS OF STUDENT

| Source     |     | df  | ms     | F    | P  |
|------------|-----|-----|--------|------|----|
| Race       | (A) | 1   | 114.80 | 2.46 | NS |
| Brightness | (B) | 1   | 114.36 | 2.45 | NS |
| A x B      |     | 1   | 23.23  | 0.50 | NS |
| Error      |     | 102 | 46.66  |      |    |
| Total      |     | 105 |        |      |    |

Note: Brightness refers to those boys who scored high on the initial algebra test and were placed in advanced classes.  
Analyses of variance were carried out for all of the PSAT scores, but Algebra, with similar results.



Table 14

RESULTS OF ANALYSIS OF VARIANCE OF VERBAL SCORES  
BY RACE OF STUDENT AND RACE OF ENGLISH TEACHER

| Source              | df  | ms     | F    | P  |
|---------------------|-----|--------|------|----|
| Race of Student (A) | 1   | 27.15  | 0.65 | NS |
| Race of Teacher (B) | 1   | 2.50   | 0.06 | NS |
| A x B               | 1   | 129.03 | 3.09 | NS |
| Error               | 103 | 41.69  |      |    |
| <hr/>               |     |        |      |    |
| Total               | 106 |        |      |    |

Note: Verbal scores are used in this analysis since performance is being studied by English class.  
Analyses of variance were carried out for the other four PSAT measures with similar results.

Table 15

RESULTS OF ANALYSIS OF VARIANCE OF VERBAL SCORES  
\*BY RACE OF STUDENT AND PERSONALITY OF ENGLISH TEACHER

| Source                     | df  | ms    | F    | P  |
|----------------------------|-----|-------|------|----|
| Race of student (A)        | 1   | 6.26  | 0.15 | NS |
| Personality of Teacher (B) | 5   | 30.37 | 0.73 | NS |
| A x B                      | 5   | 28.52 | 0.68 | NS |
| Error                      | 95  | 41.73 |      |    |
| <hr/>                      |     |       |      |    |
| Total                      | 106 |       |      |    |

\*Note: Verbal scores are used in this analysis since performance is being studied by English class.  
Analyses of Variance were carried out for all of the PSAT scores, but Algebra, with similar results.

Table 16

SOCIOMETRIC CHOICE BY PERCENT WITHIN OWN RACE  
FOR WHITE AND NON-WHITE YSHS STUDENTS \*

|         | <u>White</u> |       | <u>Non-White</u> |       |      |       |
|---------|--------------|-------|------------------|-------|------|-------|
|         | M            | S.D.  | M                | S.D.  | t    | p     |
| Initial | 60.78        | 29.86 | 52.78            | 32.37 | 1.35 | NS    |
| Final   | 61.76        | 31.71 | 49.72            | 33.26 | 1.95 | <.053 |
| Change  | +0.98        | 23.90 | -3.06            | 21.59 | 0.93 | NS    |
|         | (N=51)       |       | (N=60)           |       |      |       |

\* Only Ss who were present at both testing occasions included in the data.



Table 17

## RESULTS OF ANALYSIS OF PERSONALITY CHANGE SCORES FOR THE YSHS

| Variable                 | D       | S.D.    | t    | p      |
|--------------------------|---------|---------|------|--------|
| Test Anxiety             | .3551   | 20.1870 | 0.18 | NS     |
| MC SD                    | -.8326  | 4.0367  | 2.21 | <.03   |
| SK SD                    | .1293   | 1.9805  | 0.70 | NS     |
| ARS                      | 1.0000  | 7.5052  | 1.45 | NS     |
| Alienation               | 4.1368  | 10.0635 | 4.43 | <.0005 |
| Trust                    | .6667   | 6.1895  | 1.16 | NS     |
| Optimism                 | .6923   | 4.4537  | 1.67 | NS     |
| Intolerance of Ambiguity | -2.2650 | 7.9767  | 3.06 | <.0025 |
| Authoritarianism         | -2.7180 | 7.3142  | 4.00 | <.001  |
| Machiavellianism         | 5.9573  | 10.6248 | 6.04 | <.0001 |
| SR                       | .7094   | 7.1220  | 1.07 | NS     |
| Poor                     | .0684   | 7.9435  | 0.09 | NS     |
| <u>Mood Factors</u>      |         |         |      |        |
| Happy                    | -.5000  | 2.5000  | 2.14 | <.035  |
| Negative Anxiety         | .6207   | 1.5016  | 4.43 | <.0005 |
| Ego                      | .1638   | 1.9017  | 0.92 | NS     |
| Aggression               | 1.3103  | 2.1806  | 6.44 | <.0001 |
| Depression               | .0948   | 2.4028  | 0.42 | NS     |
| Anxiety                  | .0000   | 3.0956  | 0.00 | NS     |
| Negative Emotion         | .3707   | 1.7018  | 2.34 | <.025  |
| Deactivation             | .6121   | 3.0468  | 2.15 | <.035  |
| Activation               | .0862   | 2.0666  | 0.45 | NS     |
| Social Affection         | .0431   | 1.8528  | 0.25 | NS     |
| Concentration            | -.3017  | 1.4520  | 2.23 | <.03   |
| Hostility                | 1.5086  | 2.5143  | 6.43 | <.0001 |

Table 18

RESULTS OF ANALYSIS OF PERSONALITY CHANGE SCORES  
FOR WHITE AND NON-WHITE YSHS BOYS

| Variable                 | <u>White</u> |         | <u>Non-White</u> |         | t    | p     |
|--------------------------|--------------|---------|------------------|---------|------|-------|
|                          | D            | S.D.    | D                | S.D.    |      |       |
| Test Anxiety             | -1.300       | 19.88   | 1.81             | 20.51   | 0.80 | NS    |
| MC SD                    | -.7091       | 3.9071  | -.9508           | 4.1248  | 0.32 | NS    |
| SK SD                    | .30          | 2.41    | -.082            | 1.48    | 1.18 | NS    |
| ARS                      | 2.59         | 8.23    | -.46             | 6.51    | 2.21 | <.03  |
| Alienation               | 4.2679       | 9.2432  | 4.0164           | 10.8374 | 0.14 | NS    |
| Trust                    | -.96         | 6.18    | -.39             | 6.24    | 0.48 | NS    |
| Optimism                 | -.41         | 4.54    | -.95             | 4.39    | 0.65 | NS    |
| Intolerance of Ambiguity | -2.8929      | 7.9651  | -1.6885          | 8.0095  | 0.81 | NS    |
| Authoritarianism         | -2.3036      | 8.1551  | -3.0984          | 6.4928  | 0.58 | NS    |
| Machiavellianism         | 4.7679       | 10.3344 | 7.0492           | 10.8542 | 1.16 | NS    |
| SR                       | 1.95         | 7.42    | -.43             | 6.70    | 1.81 | NS    |
| Poor                     | .61          | 8.23    | -.43             | 7.71    | 0.70 | NS    |
| <u>Mood Factors</u>      |              |         |                  |         |      |       |
| Happy                    | -.2909       | 2.3466  | -.6885           | 2.6365  | 0.86 | NS    |
| Negative Anxiety         | .6909        | 1.5620  | .5574            | 1.4552  | 0.48 | NS    |
| Ego                      | .02          | 1.82    | .30              | 1.98    | 0.78 | NS    |
| Aggression               | 1.1818       | 2.1352  | 1.4262           | 2.2320  | 0.60 | NS    |
| Depression               | -.31         | 1.94    | .10              | 2.76    | 0.93 | NS    |
| Anxiety                  | -.33         | 2.95    | .30              | 3.22    | 1.08 | NS    |
| Negative Emotion         | .5636        | 1.8931  | .1967            | 1.5035  | 1.15 | NS    |
| Deactivation             | -.3636       | 2.9146  | 1.4918           | 2.9133  | 3.42 | <.001 |
| Activation               | -.16         | 2.25    | -.02             | 1.90    | 0.38 | NS    |
| Social Affection         | .24          | 1.73    | -.30             | 1.94    | 1.56 | NS    |
| Concentration            | -.3818       | 1.3262  | -.2295           | 1.5641  | 0.57 | NS    |
| Hostility                | 1.0727       | 2.5008  | 1.9016           | 2.4813  | 1.79 | <.075 |

Table 19

RESULTS OF ANALYSIS OF PERSONALITY CHANGE SCORES  
FOR CONTROL GROUP STUDENTS

| Variable                 | D     | S.D.  | T    | P     |
|--------------------------|-------|-------|------|-------|
| Test Anxiety             | -2.56 | 18.79 | 0.53 | NS    |
| MC SD                    | 0.06  | 4.09  | 0.06 | NS    |
| SK SD                    | -.31  | 1.92  | 0.63 | NS    |
| ARS                      | 1.75  | 6.44  | 1.05 | NS    |
| Alienation               | -3.56 | 8.40  | 1.64 | NS    |
| Trust                    | 2.06  | 6.29  | 1.27 | NS    |
| Optimism                 | -1.12 | 4.24  | 1.03 | NS    |
| Intolerance of Ambiguity | 1.25  | 8.19  | 0.59 | NS    |
| Authoritarianism         | 2.06  | 8.34  | 0.96 | NS    |
| Machiavellianism         | -1.62 | 6.35  | 0.99 | NS    |
| SR                       | -3.75 | 5.08  | 2.86 | <.015 |
| Poor                     | 2.18  | 6.34  | 1.34 | NS    |
| <u>Mood Factors</u>      |       |       |      |       |
| Happy                    | 0.66  | 2.99  | 0.83 | NS    |
| Negative Anxiety         | 0.20  | 0.94  | 0.80 | NS    |
| Ego                      | -.53  | 1.92  | 1.04 | NS    |
| Aggression               | 1.26  | 2.09  | 2.27 | <.04  |
| Depression               | -1.06 | 2.69  | 1.48 | NS    |
| Anxiety                  | -1.46 | 3.44  | 1.60 | NS    |
| Negative Emotion         | 1.06  | 1.83  | 2.18 | <.05  |
| Deactivation             | -1.06 | 4.25  | 0.94 | NS    |
| Activation               | -0.40 | 1.99  | 0.75 | NS    |
| Social Affection         | 0.46  | 2.70  | 0.65 | NS    |
| Concentration            | 0.00  | 2.20  | 0.00 | NS    |
| Hostility                | 0.13  | 2.75  | 0.18 | NS    |



Correlates of Intellectual Scores

| Initial<br>PSAT Score | Background      |                        |                       |                  | Personality  |                 |     |       |     |     |     |              |
|-----------------------|-----------------|------------------------|-----------------------|------------------|--------------|-----------------|-----|-------|-----|-----|-----|--------------|
|                       | Social<br>Class | Mother's<br>Occupation | Mother's<br>Education | Family<br>Income | School<br>IQ | Test<br>Anxiety | ARS | Alien | IoA | F   | SR  | S.C.<br>Pot. |
| Verbal                | 30              | 40                     | 33                    | 26               | 54           |                 | -21 | -40   | -42 | -39 | -26 |              |
| Math                  | 23              |                        | 26                    | 22               | 42           | -26             | -22 | -34   | -32 | -24 |     |              |
| Verbal %              | 28              | 40                     | 33                    | 23               | 49           |                 |     | -37   | -37 | -30 | -26 | -25          |
| Math %                | 28              | 27                     | 32                    | 21               | 38           | -25             |     | -31   | -33 | -24 |     |              |
| Algebra               |                 | 40                     |                       | 24               | 28           |                 |     | -21   | -26 |     |     |              |

| Initial<br>PSAT Score | <u>Mood</u>  |     |       | <u>Doob Scales</u> |      |                 | <u>Parental Attitudes</u> |       |                        |                       |
|-----------------------|--------------|-----|-------|--------------------|------|-----------------|---------------------------|-------|------------------------|-----------------------|
|                       | Neg.<br>Anx. | Ego | Deact | Temporal           | Math | Aspira-<br>tion | Sec.                      | Prec. | Mother<br>Pol.<br>Over | Father<br>Dom<br>Over |
| Verbal                | 24           |     | 20    | 22                 |      |                 | 43                        | 22    | -23                    | -20                   |
| Math                  |              | 20  |       |                    | 35   |                 | 36                        |       |                        |                       |
| Verbal %              | 20           |     |       |                    |      | 22              | 38                        |       | 21                     | -20                   |
| Math %                |              |     |       |                    | 31   | 22              | 32                        |       |                        |                       |
| Algebra               |              |     |       | 25                 | 39   |                 | 22                        | -32   | -25                    | 23                    |

Note: All correlates are statistically significant at the .05 level or less.

Table 21

CORRELATES OF SOCIOMETRIC CHOICE WITHIN OWN RACE  
FOR WHITE AND NON-WHITE STUDENTS AT THE BEGINNING  
AND END OF THE YSHS

|                  | <u>White</u>   |              | <u>Non-White</u> |              |
|------------------|----------------|--------------|------------------|--------------|
|                  | <u>Initial</u> | <u>Final</u> | <u>Initial</u>   | <u>Final</u> |
| City Size        | .26            |              |                  |              |
| Family Income    | .33            |              |                  |              |
| ARS              | -.25           |              |                  |              |
| Trust            | -.40           |              |                  | -29          |
| Optimism         |                |              |                  | -21          |
| SR               |                |              |                  |              |
| Ego              |                | -24          |                  |              |
| Deactivation     |                | -24          |                  |              |
| Social Affection |                | 28           |                  |              |
| Hostility        |                | -23          |                  |              |
| Security         | -35            |              |                  |              |
| Mother Dominant  | -24            |              | -24              |              |
| Mother Ignoring  | -34            |              |                  |              |
| Verbal %         |                | 39           |                  |              |
| Math %           |                | 40           |                  |              |
| Algebra          |                | 24           |                  |              |

Note: All correlates are statistically significant at the .05 level or less.

Table 22

CORRELATES OF SOCIOMETRIC CHOICE \* FOR WHITE  
AND NON-WHITE STUDENTS AT THE BEGINNING  
AND END OF THE YSHS

|                      | <u>Initial</u> | <u>White</u><br><u>Final</u> | <u>Initial</u> | <u>Non-White</u><br><u>Final</u> |
|----------------------|----------------|------------------------------|----------------|----------------------------------|
| Father's Occupation  |                |                              | -33            |                                  |
| Family Income        |                |                              | -30            |                                  |
| Test Anxiety         | 26             |                              |                |                                  |
| CM SD                | 27             |                              |                |                                  |
| SK SD                | 28             |                              |                |                                  |
| Optimism             |                |                              | 24             | 22                               |
| Happy                | 29             |                              |                | 25                               |
| Negative Anxiety     | 34             |                              |                |                                  |
| Ego                  |                |                              | -22            |                                  |
| Negative Emotion     |                | 37                           | 27             | 35                               |
| Deactivation         |                |                              | -22            | -26                              |
| Activation           |                |                              | 28             | 35                               |
| Social Affection     | 30             |                              | 36             | 30                               |
| Concentration        |                |                              |                | 25                               |
| Conception of People |                |                              | 32             |                                  |
| Politics             |                |                              | -27            |                                  |
| Mother Ignoring      | -27            |                              | 31             |                                  |
| Father Dominant      | -25            |                              |                |                                  |
| Self Concept Eval    |                | 31                           |                | 31                               |
| Self Concept Pot     |                |                              | 33             |                                  |
| Verbal               |                |                              | -25            | -26                              |
| Math                 |                |                              | -24            | -23                              |
| Verbal %             |                |                              | -23            |                                  |
| Math %               |                |                              | -23            | -26                              |
| % Within own race    |                | 28                           |                |                                  |

\* Number of times chosen by all students.

Note: All correlates are statistically significant at the .05 level or less.



## APPENDIX A

The following are descriptions of the personality measures and demographic variables used in the report.

**Test anxiety** - An anxiety scale developed by Professor Seymour B. Sarason (1960) of Yale University. As opposed to the majority of such scales which measure anxiety as a deep-seeded personality variable, Sarason's scale measures anxiety produced by the testing situation.

**T-L Vocabulary** The Thorndike-Lorge Vocabulary Test (1948). A short, 20 item, multiple choice vocabulary test which is used as a gross measure of intelligence.

**MC SD** The Marlowe-Crowne Social Desirability Scale (1960). A relatively new scale of social desirability independent of psychopathology. The authors conceptualize this scale as measuring "need for approval".

**SK SD** The Solomon-Klein Social Desirability Scale (1963). An 18 item social desirability scale derived from the MMPI by Edwards. This version of the scale is counterbalanced for acquiescence by utilizing nine items which are keyed true and nine keyed false as developed by Solomon and Klein. This scale is usually used as a measure of defensiveness and the "need for approval" via the denial of pathology.

**ARS** The Agreement Response Set scale developed by Couch and Keniston (1960). This measure of acquiescence is conceptualized as tapping "lack of impulse control" and a tendency to agree and go along in social and experimental situations.

**Alienation** - A measure of the Subjects' feelings of estrangement from himself and his society. This scale was developed by Gould (1964), based on a sample of students at Southern Connecticut State College.

**Trust** - An unpublished scale by Kenneth Keniston of Yale University which measures what the title indicates.

**Optimism** - Another unpublished scale developed by Keniston.

**Intolerance of Ambiguity** - A measure of subjects' feelings of discomfort in situations where there is more than one possible correct choice as reported by Klein and Solomon (1962).

**Authoritarianism** - The counterbalanced version of the F scale, controlling for acquiescence, as developed by Christie, Havel and Seidenberg (1958).

Machiavellianism - An overt measure of the subjects' acceptance of a cynical, distrustful and manipulative orientation toward the world and a tendency to use manipulation of others to gain one's own ends. This scale was developed by Christie (1960).

SR - Social restrictiveness toward former mental patients. A scale derived from the OMI, which was developed by Cohen and Struening (1964). This scale was considered a covert measure of prejudice towards a non-acceptable, stigmatized group.

Poor - Attitudes toward the poor. A scale derived from the Community Participation Index from Operation Headstart.

Moods - A series of 12 mood factors derived from the Nowlis and Green (1959) scale. The factors and the adjectives measuring them are as follows:

Happy (pleased, playful, lighthearted, happy, elated, and cheerful); Negative anxiety (nonchalant and sarcastic); Ego (detached, self-centered, and boastful); Aggression (suspicious, strong, rebellious, and defiant); Depression (blue, insecure, lonely, and uncertain); Anxiety (shock, tense, clutched-up, ashamed, lonely, and startled); Negative emotion (genial, sociable, and calm); Deactivation (tired, lazy, sluggish, drowsy and washed-out); Activation (active, lively, energetic, and refreshed); Social Affection (forgiving, affectionate, warmhearted, and kindly); Concentration (earnest, serious, and thoughtful); and Hostility (resentful, vengeful, anger, and destructive).

# Sibs - Total number of brothers and sisters in the family.

Father's Education - Number of years of education completed by the father.

Father's Occupation - Level of occupational skill as derived from the paradigm developed by Hollingshead and Redlich, 1958.

Mother's Education - Number of years of formal education completed by the student's mother.

School IQ - The IQ scores reported by school officials for the student.

Doob Scales - The eight (Temporal, Mathematics, Aspiration, Science, Conception, Security, Precision, Politics) scales were developed by Professor Leonard Doob of Yale University for last year's YSHS.

### Perception of Parental Attitudes

These scales of overprotection, dominance, and ignoring were derived from the Parental Attitude Research Instrument (PARI). The scale measures attitudes towards one's parents' child rearing practices when the subject was 12 years old, as reported by Schafer and Bell, 1958.

### Concepts

Ideal and self concept measures based on two of the three factors reported by Osgood, 1957. These scores reflect one's feelings about their own potency and how favorably they evaluate themselves.

PSAT - The verbal, mathematics, national percentile rank for verbal, and national percentile rank for mathematics scores derived from the Preliminary Scholastic Aptitude Test of the Educational Testing Services of Princeton University. In addition, the Algebra test of the Educational Testing Services of Princeton University was utilized to measure changes in algebraic ability.

Social Class - The two factors score (years of education and level of occupation) derived from the Hollingshead and Redlich (1958) procedure.

Family Income - This variable was scored to the closest thousands of dollars of total family income (i.e., A two equals two thousand dollars of family income).

City Size - The classification system of the standard dictionary listing was employed.

1. 1,000,000 and more
2. 500,000 - 1,000,000
3. 250,000 - 500,000
4. 100,000 - 250,000
5. 50,000 - 100,000
6. 25,000 - 50,000
7. 8,600 - 2,500
8. Rural area





## APPENDIX III

### YALE SUMMER HIGH SCHOOL

#### TUTOR'S REPORT

Student's Name \_\_\_\_\_

Date \_\_\_\_\_

Tutor's Name \_\_\_\_\_

1. What is the student's academic situation? Be specific. Any suggestions for extra help?

2. How is he doing in extra-curricular activities? In his dorm? Any particular problems? Is he late or missing from classes or athletics?

3. Any special interests which can be developed via Yale facilities?

4. Give a frank appraisal of student as a person: character and personality, intelligence, attitude, future prospects, social adjustment, problems which affect his life here, special interest, etc.

YALE SUMMER HIGH SCHOOL

TUTOR'S REPORT

Student \_\_\_\_\_

Date \_\_\_\_\_

Tutor \_\_\_\_\_

1. What is the student's academic situation? Be specific. Any suggestions for extra help?

2. How is he doing in extra-curricular activities? In his dorm (leader, follower, loner)? \*Any particular problems? Is he late or absent from classes or sports?

3. Any special interests which can be developed via Yale facilities?

4. Give a frank appraisal of student as a person: character and personality, intelligence, attitude, future prospects, social adjustment, problems which affect his life here. Do you see any re-entry problems which his school or follow-up man should know about? \*

\* Note modification



STUDENT'S NAME Albert UnderachieverSCHEDULE

Yale Summer High School

|                | Monday                        | Tuesday               | Wednesday                   | Thursday              | Friday             | Saturday           |
|----------------|-------------------------------|-----------------------|-----------------------------|-----------------------|--------------------|--------------------|
| 7:15-7:45      | Breakfast                     | Breakfast             | Breakfast                   | Breakfast             | Breakfast          | Breakfast          |
| 8:00 to 9:10   | Computer Science              | Computer Science      | Computer Science            | Computer Science      | Computer Science   | Computer Science   |
| 9:20 to 10:30  | English                       | English               | English                     | English               | English            | English            |
| 10:40 to 11:50 | WIFF'N PROOF<br>or<br>SCIENCE |                       | DINING ROOM<br>Room 120 OZL |                       |                    |                    |
| 12 N - 12:30   | Lunch                         | Lunch                 | Lunch                       | Lunch                 | Lunch              | Lunch              |
| 1:00 to 2:00   | Reading 'A' 12:50             | Seminar               |                             |                       | Seminar            |                    |
| 2:00 to 3:00   | Reading 'B' _____             | Reading 'C'           | Reading 'A'                 | Reading 'B' _____     | Reading 'C'        |                    |
| 3:20 to 5:20   | Sports: Softball              | Sports: Payne-Whitney | Sports: Softball            | Sports: Payne-Whitney | "Tens" Competition | Free               |
| 5:45-6:30      | Dinner                        | Dinner                | Dinner                      | Dinner                | Dinner             | Dinner             |
| 7:00 to 9:30   | STUDY                         | STUDY                 | STUDY                       | STUDY                 | STUDY              | Movie (Times vary) |
| 10:00          | IN ROOMS                      |                       |                             |                       |                    |                    |



# THE YALE SUMMER HIGH SCHOOL

## APPLICATION FOR ADMISSION

Name of student

Name of school

Home address

Address

City and State

Name of Guidance  
Counselor

The following questions should be answered by the student. Please type or write clearly in ink.

1. Name of father: Years of school completed:  
Occupation: Living: \_\_\_\_yes \_\_\_\_no

2. Name of mother: Years of school completed:  
Occupation: Living: \_\_\_\_yes \_\_\_\_no

3. If either parent attended college please specify college, class, degree:

4. Check if parents are separated \_\_\_\_ divorced \_\_\_\_.

5. Please list any brothers and sisters, giving age and occupation:

6. Your present age: Years \_\_\_\_ Months \_\_\_\_

7. What do you do to relax in your free time?

8. What activity or activities at school or outside school have been most important to you and why?

How did you spend last summer?

(over)

9. What do you consider your strongest assets and weaknesses  
as a student?

as a person?

10. Who has been the most important person in your life and why?

11. What has been the most significant event or circumstance in your life and why?

Date:

Signature:

To the student:

When you have completed this form please return it to your counselor. If you need additional space feel free to attach another piece of paper.





# THE YALE SUMMER HIGH SCHOOL

## TEACHER'S RECOMMENDATION

To the student: Please hand this form to one of your current teachers.

To the teacher: When this form is completed, please return directly to:  
Charles E. McCarthy, Jr., 17 Hillhouse Avenue, New Haven, Connecticut 06520.  
We will not be able to consider candidates for whom recommendations reach this address  
after April 7, 1965. Thank you.

The comments below are strictly CONFIDENTIAL and your frankness will be greatly appreciated.

1. Name of student:

2. Course in which you teach him:

3. His grade in that course:

4. How do you rate him on:

Potential or Natural academic ability....

Motivation or Desire to learn. ....

Participation in class discussion.....

Concern for others .....

Sense of humor.....

Ability to get along with other students...

5. Do you think he could afford the cost of a similar summer program?

6. Do his grades reflect his "best effort"?

7. Do you feel he is "under-motivated," and what areas and why?

8. What do you consider his chief weaknesses?

As a person:

As a student:

Please feel free to use the other side of this form for additional comments.

Date:

Signature:



# THE YALE SUMMER HIGH SCHOOL

## NOMINATION FORM

This form is for the use of guidance counselors in nominating and recommending boys who are currently completing the 10th grade. Please answer these questions, noting particularly the desired qualifications in boxes, then return the form with a transcript and completed student application form to: Charles E. McCarthy, Jr., 17 Hillhouse Avenue, New Haven, Connecticut 06520. We are unable to give full consideration to any applications reaching this address after April 7th, 1965. Thank you.

1. Applicant:

Last name

First name

Middle name

2. School:

City and State:

3. Please give summary of all that you know about family background, circumstances, and relationships.

4. Your best estimate of total annual income of family:

5. Is this boy's home located in a rural or urban area?

6. (One of our chief requirements for this program is that each boy have significant potential for the future in academic work. To establish this potential we will rely on test scores, high grades in areas of strong interest, and the opinion of the counselor.)

Please give all test scores available for this student:

Please give raw scores as well as percentiles

Preliminary Scholastic Aptitude Test (PSAT) \_\_\_\_\_

Other tests \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Other indications of academic potential for the future which you consider important:

7. How would you assess his potential as a person? Is he a leader?

(over)

8. (Another requirement is that the potential of this student has not been fully used. The Yale Summer High School hopes to assist students to find greater motivation and to make the fullest use of their talents in the future.)

In what specific areas and ways he has not worked up to his potential, and what do you consider to be the chief reasons for his failure to do so?

9. (Perhaps the strongest requirement is that the candidate NEED this opportunity, both financially and academically.)

How strongly does he NEED this experience in all respects? Could he afford the cost of a similar opportunity?

10. For statistical and research purposes, please indicate the racial or ethnic background of the majority of students in your school:

Is this student a member of that "majority group"?

11. As of this date, what is his rank in class?

What do you feel it should be, given his ability?

12. Is he applying to other summer programs?

13. Additional information for the Admissions Committee, such as unusual strengths and weaknesses, distinguishing traits, talents, physical handicaps, etc. (Please feel free to attach an additional page if needed.)

Signature:

Position and title:

Address:

Date:





# THE YALE SUMMER HIGH SCHOOL

## INTERVIEW REPORT

### CONFIDENTIAL

This form is to be used by Yale alumni or other representatives to report on personal interviews with Yale Summer High School applicants. We ask that you bear in mind the fact that we are seeking boys who have good academic and personal potential but who, through lack of motivation, have not made full use of their abilities. In this respect each admitted candidate must demonstrate strong need for the kind of motivation YSHS hopes to provide. There must also be great financial need, and it may be said that no boy will be admitted whose parents could afford the cost of a similar program. All matriculants will be on full scholarship.

---

Please give us your frank reaction to the applicant as a person (we have his academic record.) Does he need the program? What did he reveal to you about his attitudes, interests, ambitions, background, financial condition, etc. Please feel free to use reverse side if needed. Thank you.

When completed please mail to: Charles E. McCarthy, Jr., 17 Hillhouse Avenue, New Haven, Conn. 06520. We ask that this form be returned by April 9, 1965 at the latest.

# Y.S.H.S. ALUMNI NEWS

PUBLISHED BY AND FOR THE STUDENTS  
OF THE  
YALE SUMMER HIGH SCHOOL

Vol. I - No. II

2115 Yale Station, New Haven, Conn.

October 1965

## GENTLEMEN OF 1964 AND 1965

Here is the second issue of the Y.S.H.S. Alumni News. From now on we will have an issue every other month. The next issue will appear at the beginning of December -- a Christmas Issue! So put a mark on your calendar for the middle of November and write in about yourself then. Or make a resolution not to sit down to Thanksgiving Turkey before writing. Send in poems, essays stories, dreams, reflections....

\* \* \* \* \*

### THE PATH BACK

by Larry Ahart '65

From somewhere out of the bleak afternoon the gray, monotone murmur of the plane grew louder and louder. The man just in front of me tightened, muscles tense, shaking. The words he was saying caught in his throat gagging him. His hands curled back, fingers stiff, and with a heavy weight he sank to the pavement

"For God's sake somebody do something!" one of those who were holding him down shouted as the man with every convulsion twisted to free himself from their grasp. Blood splurged from his eyes and mouth: trickled down his face forming a pool of blood for his head to rest in.

A hand grabbed my arm. "See that?" one of the drunks slurred, it was the one they called Chief, the one with the wild, intelligent eyes. "See that? That's a wine fit. You see a lot of them here in the Bowery. That man's an epileptic. He'll die from one of those sooner or later. Take a good look."

\* \* \* \* \*

"Move back!" said the man from the mission. He had brought a spoon. He bent over the man and tried to force the spoon between the man's clenched teeth. They would not yield.

"It's too late," said the drunk next to him.

I looked into the wild intelligent eyes of the one they call Chief not knowing what to say. What do you say at a time like that?

(Continued on Page 4)

### COLLEGE ADMISSIONS

Walt Wagoner in the Yale Admissions Office makes the following recommendations about applying to colleges, which '64 YSHS'rs will do well to keep in mind this fall. He feels that guidance counselors in schools are occasionally too conservative in their estimates of what colleges you can gain admission to. While it would be foolish to get your

(Continued on Page 3)

## A WORD FROM THE DIRECTOR - JOEL FLEISHMAN

The 1965 Session of the Yale Summer High School has been over only two months, but we are already well into the planning for the 1966 Session. Many of the changes we talked about are being given careful scrutiny by members of the teaching and administrative staff, and we are all excited about the way things seem to be shaping up.

We don't know at the present time what the character or size of the returnee program will be in 1966. I am still hoping that we can find the money necessary to enable us to bring back about 40-50 of the 1965 Session participants. More on this in the next issue. In any event, keep up the good work, because that will be one of the factors we will consider in making selections for the returnee program.

We are in the process of finding community counselors for 1964 students. I hope you 1965 students are making the fullest possible use of your community counselors (follow-up advisor). Talk to him about the things you're interested in. Let him read and criticize papers you write. Maybe write a paper especially for him to analyze. Maybe select some books which both you and he will read, to be followed by discussions. Don't leave the initiative to him. Call him up from time to time and arrange to get together with him. He will call you also, but you should try to build a mutually responsible relationship.

Finally, keep in touch with us. Let us know what you're thinking generally, and specifically how school seems to you now that you've returned. What are your interests for next summer? Would you like to be considered for the 1966 Session, and, if not, are you interested in having us help find another summer program for you? If so, what kind?

\* \* \* \* \*

### I AM DEATH

For example, we've worked out a relationship with the North Carolina Advancement School in Winston-Salem, North Carolina, which will enable some of you (maybe 5 or 10) to work as tutors in a special summer program which the people there are starting for 8th and 9th graders. You would be filling the same role there as our tutors did here. Does that sound appealing?

We are anxious to hear from you, so please keep in steady touch. Let us know if there is any way in which we can help you in any respect.

I look forward to visiting with you some time this year.

All the best.

I am death  
as people know  
and yet cannot forget my glow:  
they take me to bed  
and get me hot  
and handle my body  
(my lovely white body);  
they destroy me and I likewise,  
with every breath they take.  
When I am all diminished  
and dead  
they discard my remains  
any old place.  
But deep inside I cry  
"Your turn will come!!"

Dayton Seaboy '65



## COLLEGE ADMISSIONS (Continued from Page 1)

hopes up about gaining admission to an Ivy League school or one of the top small colleges, still it will not hurt to give them a try. Walt says that some schools will waive the application fees at your request if they get to be too steep for you to afford. You should not worry too much about the cost of a college education, since many schools now have adequate scholarship funds to make it possible for everyone whom they admit to attend. Some of your tuition may come in the form of a loan which you will have to repay after college, or a job such as waiting on tables or working in a departmental office a few hours each week.

Walt says that any admissions office will regard a thoughtful, personal letter from an applicant as a very impressive addition to his file. You should refer to your reasons for wishing to attend that college in particular and ask whether there is a graduate of the school in your area from whom you could learn more about it. If possible you should visit the school and have an interview with an admissions officer.

We will be glad to write recommendations for you if you wish us to. Good luck!

\* \* \* \*

## THE STAFF

Bouncey-bouncey man Felix Fesselstyn is hard at work (we presume) in graduate school at Brown University. Meanwhile, Trevor Cushman was offered a job to teach English in Westport, Connecticut, by none other than Mr. Ciochetto. Sounds a bit fishy. Both of them turned up for a cocktail party (without cocktails) given by Bill Torbert at his Pierson College suite for all YSHS'rs in the New Haven area. Miss Dawes and Dane Archer couldn't make it because they were busy starting up a new drama group in Morse College (of which Dane is a resident). This bit of information reached us first from Mrs. Hirschhorn who was run into by Dane's motor-scooter, as she was searching for Pierson.

## REFLECTIONS ON VIET NAM By Mark Clark '64

I just want to briefly give my opinion on the present U.S. policy in Viet Nam. First I want to say I am staunchly in favor of U.S. policy for the defense of South Viet Nam. Having lived in South East Asia for two and a half years myself, I know the people very well. They are a people of remarkable simplicity, void of the complex life we witness in America. If they aren't misled they can be the kindest people in the world. If we pulled out or were to lose the war in Viet Nam it would be like condemning these people to death. The first of the American bombing raids on North Viet Nam began during the last two weeks of our stay at Yale. These raids are conducted only because there are certain eventualities that might result out of the animosity of the Communists. In a few years the Chinese will be capable of delivering nuclear bombs in our hemisphere. This will also be true of a number of our nations. Even if our actions evoked an all out nuclear war with the Communist I feel that it would be worth it because I would rather die today and have freedom preserved for the generations after me than to enjoy peace myself and see them lose their freedom. It was the same with our posterity and it should be so with us.

Concerning the teach-ins and public speeches by professors, I say that no amount of education can make an orthodox pacifist wise during these changing times. People have to learn to adapt to new situations because aggression has taken on a new definition, infiltration.

\* \* \* \*

(Continued on Page 6)

## THE PATH BACK (Continued from Page 1)

"Give me a drink," said a drunk behind me.

---

It's a million miles from Little Rock to the Bowery with the path between being covered with leaves. And the Summer High School and the things I've seen and done here are a million light years from my former experience and the pigeons are eating the bread crumbs I dropped to find my way back. The summer world I left was a golden one with its golden afternoon spent at the lake busily doing nothing all the while surrounded by beautiful golden tanned girls. It was a long path to walk and I'm not sure I want to go back or at least I don't want to go back the same.

"Think," said my English teacher, "you people don't think." This statement might sound strange; try, for even a minute, to make your mind a complete blank, to think of nothing. It's impossible, and yet often have I made the mistake of not really thinking. To truly think is to know yourself and to be fully aware of what is taking place around you. To think in this sense is to be mature. To not think is to be childish; to not care is to be a fool.

Far more important than learning of mathematics and logic, although they are interesting, is to learn to think and by thinking come to care about the world around us. Shouldering the burden of teaching us this are the seminars and the English classes and, to a lesser degree, the lectures. If you have never heard an atheist or come to understand their views, how can you say that you are a Christian? If you have never looked at life, how can you write the simplest paragraph? If you have never really read a poem, how can you call the poets fools? Unless you have seen the shoddy as well as the beautiful side of life, how can you say you know what it is about? The English classes make you look at life and try to express what you feel. The seminars too, or at least my seminar, show you to care about what is about you, surrounding you. It is more than just going to New York and seeing the Bowery and suddenly growing up and saying, "That's life. I might as well get use to it." It is a matter of feeling and knowing that life shouldn't be like that.

It might be said that it is desirable to live in a world of innocence where nothing is wrong, that to be child-like and unaware of reality is to be closer to God than being realistic. But you have to grow up sometime, the meek may inherit the earth but they will never change it. I believe my summer here has been a maturing experience. I'm not saying that in seven weeks I have suddenly become a man. The road to maturity never ends and I have only walked a few steps on it and I have a long way to walk. When I return home I must remember the things I have learned here and I must keep learning new things. I must keep maturing. No, seven weeks can't bring maturity; it must come if it ever comes, back where I came here from. The path back home is a long one and it leads to a longer path which must be walked.



## THE PATH BACK News of '65

Beginning with news from the fellows whom we have heard from since the Group Letters were sent out, we find that Gerald Henrikson shot a 5-point whitetail buck with his bow and arrow on Friday, September 24. Now he feels he can sit down to write some letters, although Hungarian partridge and goose season are in progress, he reports, and duck season opens soon. He also claims to be "engrossed" in his school work.

Mike Jones wrote a short story for his English teacher at school, received an A+ on it, and his teacher is sending it to a literary magazine to see if it can be published. He is also working on a paper route, and is a member of a band which includes two guitars, a bass, a vocalist and a drummer. They have already played at several big engagements. His paper route is intended to pay for his guitar.

Manny Sottomayor writes that Armando, Rufus, and he had a fine flight home to Tucson. Their plane offered stereo music and televised its own take-off from a TV camera located in the forward landing gear. Evidently he's in for some excitement at home also this year, since he reports his chemistry teacher can put together some masterful tests. So he is finding some immediate use for his Study Skills course.

Charles Mason writes in from Warrior, Alabama, that his teachers are impressed by his new attitude toward school. Exactly what this means he does not explain, but since he says he thinks that YSHS has really helped him we will assume that we ought to be happy.

Ken Clark is obviously deeply involved in an economics course because he has made a detailed analysis of the economics of the Postal Service. Addressing all those who have not written, his argument runs as follows: "You don't want the U.S. Postal Service to get lazy. Just think of what you're doing. If enough mail doesn't come through, the mailmen get laid off. If the

mailmen are laid off there will be no need for mailmen suits, then the clothing market falls off. Without mailmen, there'd be no mail trucks, this hurts the metal and automotive industries. To make up for these losses, these industries will hike prices on other goods, and then we will all be paying higher prices for everyday articles, so come on fellows, start writing, O.K.?"

John (St. Louie) Howell says that he is sure that everybody is glad to be back in school in order to show off what they have learned over the summer and also in order to be with girls in the classes. He clearly intends to give emphasis to the second point.

(Continued on Page 7)

\* \* \* \* \*

## I WAS TRAPPED

I was trapped, alone, with no one to call "help" to. Fear gripped my body and nearly threw me down. Struggling hard, harder, it seemed in vain until they came, dark, ugly creatures, shrilling forth their version of the deadly, luring Sirenian songs. After they came "in vain" faded away, and in my mind "impossible" lurked trying to keep me down, weakening me. I cried within me (I cry a lot these days), praying to be released. Again fear came rushing on but we fought, sending fear limping back to wherever it goes. This gave me courage, and our war began; they fought strongly. Then surprisingly the largest (the leader I suppose) suddenly weakened and I was able to say--"All right, gentlemen, in this great seminar, CLASTTA of course, today, we will begin discussing Edward Albee's play, 'Who's Afraid of Virginia Woolf'. Let's begin reading on page 12. Ralphie, you be Martha and Larry, you be George. That's all we need now, I think. Yes. All right, let's go."

Earl McCormick '65



## THE STAFF (Continued from Page 3)

Mr. Ellsworth was also able to make the party along with '64 counselors Robin Cody and Howie Gillette. Cody is working in the Admissions Office, while Gillette is a graduate student in history. Mr. Ellsworth left the party early to pack for a trip down to Virginia and North Carolina, where he has visited a number of '64 and '65 YSHS'rs.

Frank White also showed up at the party. He worked for several weeks on the Director's Report after the session was over in August, and keeps stopping by Yale, evidently dissatisfied with the relatively barren Harvard atmosphere. Perry Link reports that Mr. Wilson ran into him on his motorscooter near the Harvard Yard. Mr. Wilson is working for his M.A. in Education, having scaled several snow-covered Maine mountains during August. Perry, surprisingly enough, spent the end of August watching the National Tennis Championships in New York.

Mr. Cohan has been down to Yale from Wesleyan College several times. He, Mr. Ciochetto, Morris Kaplan, and Bill Torbert are going to be meeting during the fall to discuss the details of a new curriculum for next year's session. Morris is also putting in time as a Freshman Counselor, a first year law student and a third year graduate student in Philosophy.

The man who found families with lovely daughters for so many students this summer, Walt Wagoner, has joined Robin Cody in the Admissions Office and is also working on an exchange program between Calhoun College (where he lives) and Talledega College in Alabama. And the man who took pictures of everyone (lovely or not), Alberto Lau, has developed stacks of photos which adorn the walls of Mr. Fleishman's office and will be used to lend authenticity to the Director's Report.

Tappy Wilder is heard from quite frequently. About twice a week the YSHS office receives

an envelope with the return address of Amos T. Wilder, Graduate Student in History, University of Wisconsin, Madison, Wisconsin. Inside these envelopes one usually finds a key or a sock and a small piece of paper saying, "Sorry, this belongs to Alvarez (or Peterson or Dew). I just found it in my back pocket. Please forward."

Jon Culler spent a grueling vacation in Spain after the session this August hiking 275 miles in two weeks along the medieval pilgrimage route Santiago di Compostella which goes straight across northern Spain. "Our route," he says, "was a dirt road which passed through tiny villages completely cut off from civilization. We slept in shepherds' cottages, eleventh century monasteries, tiny village cafes, schoolroom floors-- wherever we could find... The people grow wheat and potatoes and keep a few chickens. Often we could get no meat in the villages. Or sometimes only horsemeat. Potatoes, eggs and olive oil. Even cookies taste of olive oil in Spain."

Sadly (for us) Gwen Sims is no longer with us in the office. She is continuing her singing career and will be singing in Germany over Christmas. Laura Grant, whose husband is a law student at Yale, has taken her place.

Mr. Fleishman is in and out of New Haven, travelling at a furious pace. Most of his trips are to Washington where he is a consultant to the Office of Economic Opportunity in connection with the Upward Bound Program. He is also studying the possibility for wider faculty, student, and administrative exchange programs between northern and southern institutions. And he keeps saying that he will soon start working half-time on his doctoral dissertation in law.

"In the disciplined home, the children have no rights. In the spoiled home, they have all the rights. The proper home is one in which children and adults have equal rights. And the same applies to school." A.S. Neill, Summerhill.

'65 Tribe

(Continued from Page 5)

Ralph Miller reports briefly that he is enjoying all his teachers and classes at school this year, but seems to be most concerned about the fact that "since Georgia beat Alabama and Purdue beat Notre Dame, the Arkansas Razor Backs are #1. Arkansas has won 14 in a row." He seems to regard this as an important fact for you all to know.

Mathew Dew reports that it took him about 50 hours to get home because he missed a bus in Chicago. His subjects were so easy when he returned that he didn't need to study, according to him. Now they are getting harder and he is finding the Study Skills useful.

Moving on the fellows who sent their letters in on time to be included in the Group Letters, Joe Prusakowski claims that YSHS has ruined him for life. He seems to have developed some ambition. He reports he has started lessons on the guitar, is looking for a job, has gotten into the habit of receiving A's on most of his school papers, will work for the school newspaper this year, and try out for at least one sport. "I considered telling my gym teacher about 'bouncy-bouncy' but I didn't, because if he used Yale's program I wouldn't be overly popular with the rest of the guys."

Phil Brown has evidently become an eminent personality in his own town. His class has asked him repeatedly to teach it how to play WFF'N PROOF and he has led a discussion on Antigone in his English class. Furthermore, his principal has asked him to write an article concerning his stay at Yale and the purpose of the summer high school for his local paper, The Florence Morning News. He is also being interviewed by his school paper.

Bernie Dahl has had a different experience with WFF'N PROOF. He says, "my people here at home don't get along very well with WFF'N PROOF. I've tried to teach them but it's kind of hard."

George Mills, however, adds weight to the positive side, saying that his younger brother finds WFF'N PROOF quite exciting. He has also contributed the puzzles he did at YSHS to his math class and it is having a puzzle contest. He is playing quarterback for the football team and has the office of vice president of the S.C.A. In that capacity he is planning the school's programs for the year, beginning with one on the Honor System.

The two Teds, Osterloh and Slipchinsky, report that they have won their driving licenses. Other than that though, Osterloh's summer after the session was, as he puts it, a flop. "I ended up playing tennis and basketball most of the time, and if you've ever seen me play basketball, you'll know that I was pretty hard up." He also had to make such difficult adjustments as learning to get up at 9:30 instead of 6:45. Slipchinsky reports that his courses in school are only mildly interesting, but "every once in a while I escape to the dry cleaning place next door and read some of Ferlinghetti's poems. I bought his book, 'Coney Island of the Mind.' That's when I really learn something."

Slipchinsky has recently formed a sort of Literary Group at his school to read and discuss interesting contemporary books. He interested two English teachers in his idea and received the principal's permission to use a classroom after school. It should be an exciting project.

Quincy Robinson discovered that one of his great weaknesses, his inability to deliver a speech, has ceased to exist, when, during his first week of school, he was asked to deliver an impromptu speech about Yale this summer. He also claims that he can now finish any algebra book in less than three weeks.

Lenny DePanici has already started basketball practice and is hoping to make the varsity this year, while Dino Rodriguez is finding algebra quite a sport too. He says that it's a "a breeze."

(Continued on Page 8)



'65 Lives

(Continued from Page 7)

It is difficult to tell just how easy Rudy Salazar is finding his work. He says he will feel free to pester our office whenever he has any problem on his homework, but on the other hand we haven't received any problems yet, so he must be doing well.

Curt Martin is playing halfback for his team in Kansas City which is rated #1 in the Interscholastic League there. He says that his team "Central" beat Harold Brown's team "Lincoln" 27-7. (We have not heard from Harry.)

Tom Remillard finds his favorite subject to be Biology II. He also likes Basic Electronics and U.S. History. He claims he misses many things about YSHS, especially the mixers.

Pete Pakas has been busy applying Mr. Wilson's techniques to a number of achievement tests which he has been taking. He writes "Unfortunately, I have been suffering some of those frustrations they warned us about on the Mike Wallace Show. I have particularly been troubled by the attitude and systems of a few of my teachers. But I have decided to make a 100% effort to adjust to and make the most of the methods of my new teachers. In this way, I hope we can learn a lot from one another."

Eddie Palmer reports that he had to crawl out from under his French and Chemistry homework in order to write. However, they obviously piled up on top of him again almost immediately because he didn't have time to send along any real news about himself.

Tony Partee certainly wins the prize for the longest letter. He includes a lengthy description of the many busses he missed in New York while trying to get home. His courses include International Relations ("All you do is sit around and talk about war and the causes of war and all that type of grit") and Applied Radio ("you go around collecting questions like 'How many flies were on President Johnson's

dog's, Him, right ear at 2:35 p.m., August 10, 1963.'") He also maintains that he lost 34 1/4 lbs. over the summer, but does not send in any before and after photographs to prove his point.

Two counselors, Jimmy Smith and Sal Conte, are both presidents of their Student Councils. Jimmy reports that his basketball team and has already started practicing and is looking forward to another conference championship. Sal's principle extra-curricular activity has been in another direction -- he reports that he is officially going steady.

Mike Adams started school as usual in Camden, New Jersey, but was suddenly invited to attend Andover, a fine boarding school in Massachusetts. He rushed up there in order to be in time to start school again. His roommate sounds as diverse as the whole Summer High School put together. Mike reports that he comes from Nebraska but has been to Viet Nam, France and various other places throughout Europe, Asia, and the United States.

Dale Messmer has written a letter with his usual beautiful penmanship, but claims it is left handed this time, since he broke a number of fingers during a football game.

Sylvester Bass reports that he and George Regan were greeted with a homecoming party when they returned to Mississippi. He has been in Court, representing his club and his sister club in a suit against a police officer.

Terry Puffer has gotten off to a fast start at Tilton School which he is attending this year and which is only a couple of hours away from his home in New Hampshire. He has two roommates in one room. He has an A- in algebra, but is finding his history course difficult.

Tony Peters is at the Mount Hermon School in Massachusetts, quite a ways from his home in Washington, D.C. He is beating most of his courses, and is having trouble only with German. He is also a member of the Radio Club, the Airplane Club which is rebuilding an old airplane, and the Outing Club which makes weekend trips.

(Continued on Page 9)



## '65 JIVE

(Continued from Page 8)

Wayne Mixon in Birmingham feels that he's ahead of the game in both English and math this year. He is taking more subjects than he normally would. Charles Fulkerson in Oak Ridge is also taking an extra subject this year.

Bob Cottrol and Ozzie Charles have evidently continued their debating over the telephone in New York. Bob reports that he spent an evening at the World's Fair before school started and allowed his fine tenor voice to rise in song, causing him immense popularity. He is now taking a number of subjects including Art Appreciation ("They're going to make you appreciate art whether you do or not").

George Burns reports a peculiar problem. "I wish that I could go back to being my old bashful self again," he says, "because now I've got more girls than I can handle. One thing though, I never let the opposite sex interfere with my school work." (The editor is highly suspicious of the veracity of the latter statement.)

Tom Dial reports "Nothing important has happened around here lately except that they have banned the song 'On The Eve of Destruction' down here. At least they never play it on the radio. We have started a campaign to get it back on. We would like all the boys who live in Alabama to help us if you will."

Tom Neville reports that after missing his home in Mississippi while at the YSHS he returned home only to miss Yale. However, his teachers have been kind enough to drown some of his nostalgia in a flood of homework.

Wayne Howard is, of course, deeply involved in art. "I have my doubts whether or not my teacher knows what she's talking

about. She makes us crank out one minute sketches of a kid on a table posing. One minute is an awfully short time for an entire figure, but that's not the half of it. To make these drawings 'free' and 'expressionistic' we have to hold our pencils by the very end, in our 'wrong' hands and stand up while we do them."

The Blair Breeze, the school paper of Blair Academy in New Jersey, reports that one Van Pinnix is running a 4:36 mile. Van was admitted to Blair late in August and is already doing well academically.

Woody Torrence is taking what sounds like a killing schedule this year with advanced courses in math, English, and two foreign languages, as well as chemistry and U.S. history. But he also seems to have time for the football games, dances, and other social activities, so we won't begin worrying about him yet.